THE UNSTABLE CHILD

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THE UNSTABLE CHILD

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UNSTABLE CHILD

AN INTERPRETATION OF PSYCHOPATHY AS A SOURCE OF UNBALANCED BEHAVIOR IN ABNORMAL AND TROUBLESOME CHILDREN

BY

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TO

MY MOTHER AND FATHER

WHO LIVE WITH A FIRM BELIEF IN

That which is out of sight,
That thread of the all-sustaining Beauty
Which runs through all and doth all unite.

PREFACE

The last word on the significance of mentality and mental testing has not been said. Social problems are beset with a tangled mass of psychological studies and reports which leave the person who has actual children to handle tired, perplexed, and at sea. Twelve years of mental testing by modern methods lie back of us. The optimistic assurance of the first few years of such work still persists among novices. The making of a psychological diagnosis is still considered in many clinics a mere matter of technical skill. But in the practical work of courts, dispensaries, and schools a new attitude of eager and critical questioning has developed. Managing the everyday problems of delinquent and troublesome children has definitely demonstrated the fact that a diagnostic classification or a mental age has little to do with the solution of our social and educational crises.

Is mental endowment an important factor in the evolution of the child who is potentially a law-breaker? Probably it is, but all troublesome and delinquent children are not feeble-minded or even backward. The child whose mental defect may be easily demonstrated by the routine of mental tests is not a difficult individual to handle. The question of obtaining permanent provision and protection for him may be difficult because of limited custodial facilities, but the individual himself presents no traits that are not easily understood and explained. It is the child who is bright but different, the child who gets along in his school work but who upsets the schoolroom by behavior which is exasperatingly unexpected, the child

whose behavior needs immediate modification but whose peculiarities leave one in doubt as to how that change may be produced that causes most of our worries. Operations, treatments of all sorts, better environments, industrial training, education, supervised recreation, and all the other advantageous resources of modern social service have not been able to eliminate such problem children.

Nor is this the whole situation. Given two children of the same actual age, with similar mental ages, satisfactory environments, suitable recreational facilities, and proper schooling, one will present every potential indication of becoming a good citizen, whereas the other will reflect all possible vagaries of unreliable behavior, wrong desires, and wrong principles. Even in most of the case studies available one finds no indication of the reason why such variability appears. There is a definite cause, however. Back and beyond the various factors which are usually enumerated in such cases there lies an aspect of mental endowment which the present era of mental-age determination has sadly overlooked. Just as each individual has a certain mental level or *quantity* of intelligence available, so he has a definite *quality* of that quantity. This quality may be good or poor. No matter what the child's mental level, that intelligence which he has may function efficiently, inefficiently, peculiarly, disastrously, or unpredictably, because of such *difference of quality*. This complicates matters exceedingly. Actually, a statement of the mental level of a child may be most misleading, for any child is apt to be the one in whom mental function, not mental level, is the determining factor in behavior. We often hear mental tests spoken of as a "measuring scale." The consideration of mental function adds a third dimension to this measuring of the individual.

The erratic behavior of the child who tests normal, the peculiar inability of some bright children, the tan-

trums of incorrigibles, the economic independence of some individuals who "test feeble-minded," and many other discrepancies met in social problems find their explanation when one studies the variability of mental functioning rather than the mathematical determination of mental age. This statement is neither far-fetched nor unjustified. Most books are an expression of some fact or of data which have been discovered by the writer. This book does not claim such a reason for its existence. It is primarily the exposition of an attitude. Yes, there are facts presented. The facts presented *are*. They show the actual presence of mental variations and deviations in function in a group of troublesome children in whom the mental-age determination had revealed no reason for delinquent tendencies. These facts were gathered with scientific impartiality. Their interpretation is probably less assured, for it is the result of the attitude assumed in dealing with these cases, namely, that back and beyond mental age lies the socially significant factor of mental function. It is this factor which correlates far more closely than mental age with our everyday social problems. It is wrong mental function, psychopathy, as we call it, which explains why a child acts as he does when heredity, environment, physical condition, and education give no clue. It is functional deviation which sounds a note of hope for the future. "Once feeble-minded, always feeble-minded," promises nothing of hope for the future of those whose mental level is definitely and abnormally low. When, however, instead of inferior mental level we have a mentality which is disturbed, diseased, and functioning wrongly, the future is apt to be more promising. The diagnostic determination of wrong function is but a forerunner of corrective education, definite mental hygiene, and therapeutic "punishment" in the proper kind of hospitals. Nor is this a rainbow vision of pure theory. The writer offers but one argument for such

an attitude and for the functional interpretation of mental ability. It is the old trite reason, the interpretation has proved workable. The continued application of it to more children, more extreme types of delinquency, and more involved social problems has but strengthened the theorem which such work formulates for itself. . . . There is no such thing as a bad child. Either he does not know any better or else he cannot help it.

F. M.

CONTENTS

PAGE

PREFACE vii

PART I

THE UNSTABLE CHILD IN THEORY

CHAPTER

I. THE ORIGIN OF CLINICAL PSYCHOLOGY 3

II. RECENT TENDENCIES IN CLINICAL PSYCHOLOGY . 15

III. PROBLEMS OF TO-DAY 34

IV. THE FUTURE LABORATORY OF CLINICAL PSYCHOLOGY 55

V. THE CLINICAL PSYCHOLOGIST, HIMSELF . . . 63

VI. MEANS AND METHODS 79

VII. VERIFICATION OF RESULTS 102

VIII. RESULTS SO FAR OBTAINED 117

IX. A NEW ANGLE: PSYCHOPATHY 143

X. METHODS OF DETERMINING PSYCHOPATHY . . . 163

XI. SEREPTA, A PSYCHOPATH 193

PART II

THE PRACTICE OF PSYCHOPATHY

XII. THE DELINQUENT AS A DEVIATE 215

XIII. A PRACTICAL STUDY OF DELINQUENTS 235

CHAPTER PAGE

XIV. Children under Six Mentally 248

XV. Children Six to Nine Mentally 259

XVI. Children Ten to Twelve Mentally 299

XVII. Normal, but— 328

XVIII. Intelligence Plus Delinquency 359

XIX. Generalizations 380

XX. Congenital Syphilis 388

XXI. Conclusions 432

Bibliography 461

Index 467

PART I

THE UNSTABLE CHILD IN THEORY

THE UNSTABLE CHILD

CHAPTER I

THE ORIGIN OF CLINICAL PSYCHOLOGY

No new development in any field is properly understood unless one views it in the light of that from which it has grown. Only by keeping a perspective which relates the old to the new and, contrariwise, builds the new out of the old, can we properly evaluate, criticize, reject, or accept the new aspects of any movement. Psychological developments exhibit no exception to this need. Indeed, the very nature of the problems which confront the psychologist is such that he, more than most folks, needs to keep absolute balance and realism in his understanding of the changing aspects of his professional field.

To review the whole field of psychology as it has grown to its present activity would be but of indirect use to us in a study of that special branch which we call applied psychology and of that division of applied psychology which we call by the various names of clinical psychology, mental measurements, or intelligence testing. We must, however, see the relationship of one division to the others. Psychology is a new branch of the scientific study of man. Less than fifty years have passed since the distinction of how a human being feels and thinks about himself was first thought sufficiently important to deserve separate attention as a line of special research. Such research as it first attracted was medical in character, later became more definitely physiological, and was finally differentiated into the independent branch of psychology. For ten, fifteen,

almost twenty years practically the whole field studied was that of the sensations and the reaction times. This was the natural starting point, for the understanding of heat, cold, pain, pressure, and the other elemental sensations was definitely related to the study of man's body. The other side of the situation, the brain's reception of the stimulation of such nerve cells, was at that time but a secondary matter. Research soon led to a better appreciation of the two-fold nature of the problem, and out of the study of this second aspect has grown present-day psychology—theoretical, experimental, and applied (one hesitates to say practical).

Let us emphasize one point immediately. Although psychology has become a separate branch of the scientific study of man and other animals; although it has specialized itself as the study of behavior in definite relation to definite stimuli; it has never separated itself from that older study of man as an organism, from which present-day medicine, physiological chemistry, odontology, dietetics, hygiene, and all the other branches of the more or less exact study of human beings have evolved. They are all most interdependent upon each other.

Naturally any one such line of observation and study must have two aspects, first the research aspect or the search for facts, and second the application of these facts to relief, improvement of, or at least understanding of, the problems investigated. Usually the two go hand in hand. A partial truth glimmers through the study of one case or condition. More research on it proceeds by a cautious, *necessarily experimental,* usage of that data in the next instance. It is thus progress is made. But psychology has developed in a fashion that is rather different from these other humanitarian sciences. The interest in it was, at first, largely speculative and philosophical. Little of practical value was apparent in the exact knowledge of how simple sensations were felt. Whether an individual reacted to a certain

situation in one-fifth of a second or in three-fifths of a second seemed to have no practical significance. Even in the late nineties the study of ideas was counted a part of philosophic foolishness, well relegated to poorly paid chairs in a few universities. Out of this grew the generally accepted concept of fifteen years ago. The psychologist was an "arm-chair" scientist, absent-minded, of little importance in the solution of social problems, theoretical and easily befogged, a childlike individual, reading dustily and publishing tomes which none read. This very misconception gave psychology the chance to grow unhampered into certain definite procedures, to gather a mass of reliable data from workers who were uninterested in fame, competition, worldly success or immediate practical utility of their findings. Truth for Truth's sake was the motive of all psychological laboratories here and abroad for some thirty years.

Of course, we must recognize that during this earlier period there were many more or less successful attempts to apply psychological findings to practical problems. The field of abnormal psychology claimed most of these efforts, for there, and there only, could be found in abundance obvious deviations from modes of thought and ability to think as they are usually found in so-called normal individuals. No complete system of psychological study was evolved. Instead, a quaint mixture of the primitive in psychology, the obvious in practical life, the useful in medical practice grew up into psychiatry. (Even to-day most psychiatric manuals devote half of their space to the formulation of known facts concerning the sensations and dismiss the emotions, learning, memory, and the higher thought processes in a few pages each.) Educators of this earlier period did a great deal, especially in the study of the learning process itself. A mass of facts was arduously compiled on the relation of many various factors in the

method of teaching to the value of learning. Through this developed the impetus to the laboratory study by modern psychologists of types of imagery, modality, types of learning, fatigue, and the many related problems of recall and forgetting.

But, in general, no great social demand was made upon the province of psychology until Binet's inspiration showed how known facts might be more readily made to yield more scientific data and yet give practical service at the same time by using them to measure mental development or intelligence. Less than twenty years ago his work took this form, and yet we hardly need to state the significance of what he accomplished for present-day education, sociology, medicine, psychiatry, legislation, philanthropy, and criminology, as well as psychology.

Two things psychology had evolved which he incorporated in his contribution: First of all, certain facts of human behavior or ability. But these could have been gathered in a few years, had they not been at hand. Second, and far more important, was the contribution brought by the rigorously enforced traditions and ideals of all psychological laboratories of the day. Since they were in search of truth, truth was the handmaiden, and exactitude became the constant measure of worth on all done. Exact procedure, not dependent upon the worker's memory but written down, exact records of results, exact and definite terminology, exact impersonal statistical evaluation, these formed the basis which rendered possible the development of a method which studied individual deviations, and from such a background sprang into existence the measuring scale of intelligence.

No unprejudiced person would claim that Binet based his accomplishment upon developments in psychology alone. A certain ingenuity in the use of modern statistics and of modern child study were also necessary, and only the de-

velopment of community interest in the individual with an honest desire to provide for inferiors could have given opportunity for the problem to be worked out. In other words, Binet succeeded in his attempts at measuring intelligence in a practical way because he reënforced the experimental findings of psychology of his day by his use of progress and development in related fields. The chief factor in the demand for some sort of tests was a desire to eliminate definitely feeble-minded children from the general school classes of Paris. The educator viewed children from the angle of their trouble-making propensities in the school room, their linguistic ability, or some other specialized function. The physician inspected them from the standpoint of gross physical indications of inferiority, that is, with especial consideration of their "stigmata of degeneracy." Neither of these methods solved the problem, so Binet developed a new set of criteria, "mental" in their purport, dependent upon actual ability and not upon age, sex, grade, physical ability, or special home training.

The measuring scale as evolved by Binet had attributes which could not help but insure its successful application.

1. The simplicity of the plan, which made it easy for those practically concerned to grasp the theory.

2. The definite, exact directions for general and individual test procedure, enabling workers to quickly educate themselves in the giving of the tests.

3. The brevity of the individual task and the variety of tests which kept the subject interested and lessened fatigue.

4. In the year evaluation, the ease of relating the test findings to the child's actual age and to that which a child of his age should do guaranteed successful interpretation of findings to parents and lay persons interested. No more valuable method of scoring tests in relation to norms has ever been developed than this, which groups tests definitely by their norm values.

The result of the introduction of such tests into the solution of educational problems was at once far-reaching. It is barely thirteen years since the first brief translation of this scale was published in a little magazine in this country which had but a few thousand subscribers. For two or three years after that practically all usage of the scale was tentative and even skeptical. But use brought the best of proof. Although the tests were based upon imperfect and insufficient norms and did not fit American children in many details, yet they were so much better than any of the methods previously used that their widespread adaptation was limited merely by the number of individuals capable of giving the tests. Summer schools and winter classes in normals, colleges, and universities soon gave a sort of superficial training to hundreds of teachers and less well-prepared students. "Mental testing" became the rage, and it would be hard to find a group of individuals of any special character who have not been tested. Schools, prisons, reformatories, colleges, professors, maids, tramps, Indians, negroes, whites, all have had mental-age ratings. With what result?

At first, practically all efforts were directed towards the detection of the feeble-minded in the various groups. This was not only natural but inevitable. Binet's own purpose in developing the scale had been the detection of feeble-minded children in the school system. That was the only efficacy he really claimed for the method. In this country, due to the position and interests of the man who introduced the scale, usage was two-fold from the very beginning. Even before he had published an abstract translation of the scale, Goddard and his assistant in the psychological laboratory at The Training School at Vineland, New Jersey, had applied the test to the whole population of the institution with unexpectedly favorable results. Those who are familiar with the first year arrangement of the scale will recall

that the definite standardization runs only through the twelfth year, with an imperfect attempt at a group of thirteen-year-level questions. None of the children in the institution passed the twelve-year limit save one whom no one thought feeble-minded (physically handicapped). The findings were then tried out in a practical way. Lists were made up grouping the children according to mental age, and these were submitted to the supervisors, matrons, and other staff members who best knew the children. In general, they were willing to accept the group at any one mental age as being composed of children similar in ability. Here and there a person objected, seeing superiority or inferiority in a certain child, but usually some one else contradicted the discrimination, so that, on the whole, the test grouped the children in a fashion which agreed with the balanced total of experienced observation on them. Naturally the test at once became an objective criterion used to determine the admission rating of new children and consequently was soon utilized as an aid in the diagnosis of children brought for advice and consultation. This was undoubtedly a step of tremendous importance in the field of clinical diagnosis. Before that time the usual procedure was not a standardized one in any way. The experts on the diagnosis of feeble-mindedness were essentially the men in charge of the various institutions for the feeble-minded. They had the *greatest amount* of *practical experience,* and that meant, up until 1911, the *greatest diagnostic ability.* There was no standardized method of evaluating their experience. Most superintendents placed a good bit of emphasis upon the age at which walking and talking began. To some, the physical earmarks were the most final proof. Others devoted nearly the whole of their inquiry to a sensible, but haphazard, study of accomplishments. Of course, the low-grade children, the idiots and the idio-imbeciles, were too obvious to need any such careful scrutiny, but all

the time there came the higher-grade children whom it was not so easy to diagnose, necessitating the use of these individual methods of testing with emphasis upon the examiner's experience as the basis of his clinical determinations. It was no unusual thing to have a child brought for study who had been to every man of any repute within hundreds of miles, but, more than this, from all those consultations would come no specific data, no comprehensible rating of the child which made definite his condition to parents, teachers, or other diagnosticians. The introduction of a *concrete* rating into the clinical study of a child changed all this. Even though the details of an examination made by one person were not immediately known, or even comprehensible, to another the final rating was brief, tangible, and far less influenced by any personal factor than other diagnostic phrases. "Somewhat feeble-minded," "high-grade feeble-minded," "high-grade imbecile" mean one thing to one person, another thing to another, but "seven years in mental age," or "ten years," means a particular stage of development and ability. It is not hard to see why the "mental age" soon became at least an important adjunct to the majority of clinics dealing with the mental problems of children. A few months' experience in applying the test gave ability which in many instances, at least, balanced the painstakingly gathered ability of others who had acquired it by years of experience without precision of method and uniformity of tests.

But by far the most radical change came in the immediate application of the tests to school problems. Goddard did not rest content with trying out the scale on children in the institution but followed it by a survey of the whole public-school system of the village of Vineland.[1] In all, approxi-

[1] Henry H. Goddard, "Two Thousand Normal Children Measured by the Binet Measuring Scale of Intelligence, *Pedagogical Seminary*, June, 1911, pp. 232-259.

mately 2,000 children were examined. The work cannot be given too high credit for its pioneer value. Nothing of the sort had ever been done before. The schools were submitted to an unusual demand; children, one after another, all from each room, from the first grade through to the high school were examined individually. The emotional strain of the work was high, for no one knew at what moment some hypersensitive parent might object and stop the whole program in some unforeseen manner. The survey was made in a fashion which would be commendable even to-day. A card index checked grades, names, ages, and teachers' estimates. Experienced social workers, women of tact and training, were used. The testing was limited to school hours. No child lost his recess, stayed after hours, or came earlier. Binet's atmosphere of comradeship, games, and praise prevailed. The test results were worth while, even though they would in no way meet our present standard for diagnostic work. The ease with which the children could be differentiated into feeble-minded, backward, normal, and bright, and the agreement between this rating and the problems that such children presented to the teacher stimulated belief in the validity of the scale, although many minor discrepancies, such as special difficulties of various years and undue difficulty or ease of individual tests, appeared.

Other comparative studies were soon made and the next six years may be briefly described as a period of mental-age determination and, almost, of mental-age diagnosis. The validity of the scale findings led to a non-scientific, practical acceptance of them as the *whole* method of intelligence study. Most tests were given for the purpose of determining the number of feeble-minded in a given group. The educational and legislative propaganda of the time stressed the vast number of feeble-minded and the need for provision for them. In a way this was an excellent thing.

We needed something to make us break away from the single educational prescription with which we had been dosing all children. Special needs were realized, and teachers, feeling the tremendous relief which came from knowing it was defect in the children and not in their own teaching which made some fail, became the most ardent supporters of Binet testing. Special classes began the relief provision, and increased institutional provision followed more gradually. Neither of these are now actually issues. They are accepted needs, depending in their development only upon the amount of education a community has been given or the weight which can be brought to bear upon a legislative body to make it see and plan appropriations. So far—so good.

But there is another side to the whole subject. In general, there can be no doubt but that the introduction of the mental test as a means of determining the part intelligence plays in social, economic, and educational problems has been a tremendous advance over the personal evaluation methods. *But* the advantage gained has not been without tremendously important disadvantages. Early adoption of the scale was almost universal, and, in most instances, it was put into use without any accompanying checking-up or corroborative test. This is not so much the fault of any one person or place as it is a result of the great demand for the scale, although both factors must be considered. Some of those who should have known better claimed all possible things for the test. Of course, they were naturally quite content to have others use the scale regardless of their fitness through earlier training to understand the limits of a test and to guard its applications accordingly. With blind naïveté they taught all they considered necessary of Binet's system and theory in six-week courses and sent out their students ready to use only this one test but feeling sufficiently able to meet the demands of the situation

since they could use the Binet with slide-rule accuracy. A large group of "mental testers" resulted, a group who often claimed to be "psychologists" and whose ability training and presumption reminded one most forcibly of the medical assumptions of the graduates of some schools of chiropractic and herb-doctoring. To this group the whole question of diagnosis was one of mathematical simplicity. When a child tested at a mental age which approximated his actual age, he was "normal." When his mental age was one or two years below his actual chronological age, he was "dull" or "backward." Three years backwardness made him "very dull" or "very backward," and more than that made him "feeble-minded." In the same way a mental-age superiority of one or two years made him "bright" and more than that made him "very bright," or "precocious." There were no loopholes left to the imagination! In most instances there was no attention paid to family history, developmental history, school progress, or even physical handicaps, except the most serious. Even in the laboratories accepted as leading the movement, supplementary data were largely a matter of the research interest of the individual examiner. Excitement centered about the rate of examining, the number of children an individual examined in a day, and especially around the percentage of feeble-minded found. As a result, the *individual* was lost sight of in the swirl of the group to which he belonged. No room was made in this one-way scale of evaluations for the exceptions. They did occur. Goddard himself reports precocious and normal children in families where both parents and all older children were definitely feeble-minded.[2] At the time, these few cases were considered as rather anomalous exceptions to the general expectation of Mendelian inheritance. With our knowledge of the fact that there is such a thing as a potentially feeble-minded

[2] Goddard, *Feeble Mindedness: Its Causes and Consequences.*

individual who does not show any retardation on intelligence tests until the age of seven or eight or nine this single testing report of such children is not sufficient in any way to leave other than an open question as to whether later examinations might not have shown that these children (six out of 482 living children in families where both parents were feeble-minded) just happened to be caught before retardation was sufficient to be obvious in our intelligence test findings. In the same way the most amazing reports have been presented and gravely accepted as to the percentage of feeble-minded individuals in institutions of one type or another. For instance, Fernald in his report of the white-slave investigation of Massachusetts estimates at least fifty-one per cent of the girls as definitely feeble-minded after all doubtful cases had been counted as normal.[3] Yet this whole study, based upon the habit of confirmed immorality, takes absolutely no account of the possibility of psychoses of a sexual nature, deteriorations due to the possible and probable presence of the disease especially courted by the very nature of their offense, that is, syphilis, and the possibility that confirmed psychopathia sexualis *might,* without being feeble-minded, have inferior levels on mental tests. The report of the percentage in this group affected by syphilis is handled independent of its bearing upon the intelligence or social factors of the situation.

One could multiply indefinitely illustrations such as this, but the reader can easily supply them for himself. *Indeed,* the *apparent simplicity of the measuring of intelligence proved the greatest drawback to the actual growth of the professional application of the method.*

[3] Report of the Committee for the Investigation of the White-Slave Traffic, So-Called, February, 1914.

CHAPTER II

RECENT TENDENCIES IN CLINICAL PSYCHOLOGY

Of course, American enterprise was not long content to rest using Binet's own scale and so, having been presented with the idea, soon evolved a number of other "scales" of varying complexity and value. The Goddard revision was the first of these and supplemented the original Binet in several ways, besides rearranging tests more in accordance with findings on American children. The Point Scale was the next revision of any importance. In it Yerkes attempted a test rearrangement which would meet the criticism the earlier scales evoked, namely, that all tests, easy and difficult, scored the same number of points and that some ratings were consequently most unfair to the individual. By point weighting more difficult tasks, through giving them two, three, or six points of credit each, he totals 100 points to the scale. In this revision he discards the year gradation evolved by Binet and so loses one of the most important contributions of the year scale. Any one, almost, could work out a set of test questions, give them to individuals, and score successes and failures on them without having any very critical idea of the ability of the persons tested when all was done. The year scale is just such a set of tests, *but* each test result is immediately converted into a critical statement of the individual's *level* of ability in that respect. For instance, to know that a child, let us say, of the age of ten cannot draw a diamond is one thing; to know that he cannot draw a diamond and that *this is a seven-year-level test* is a far more definite criterion of his ability. It gives significance to each task as completed.

This immediate *interpretation* of test performances is lost in the Point Scale. .

In all probability the most widely used revision of the Binet is the Stanford. There is every reason why this should be so. The scale is more accurately graded from age to age than any other before it, the tests range in applicability from the three-year to the adult (16 yrs.) and superior-adult (19 yrs., 6 mos.) levels. One may question some of the extreme values, but, as a whole, the standardization has been so thoroughly determined and the details so accurately established that it seems worth using extensively before presenting further complications of the field by introducing new mental-age substitutes. To the great majority of those who know a little about intelligence testing the Stanford revision *is* intelligence testing. All else is an excess of seldom-applied tests. Unfortunately, this attitude is not restricted to those whose psychological training has been limited to courses in mental testing. There are a number of laboratories purporting to run psychological clinics which are content to diagnose upon a Stanford mental age. Within the year, the writer has had personal experience with an assumptious individual whose pride has been ability to apply a Stanford Binet in twenty minutes and who contentedly diagnosed over eighty per cent of a group of environmentally handicapped children as feeble-minded, using only this one criterion. Worse still, these diagnoses were accepted, backed, and used by the laboratory chief under whom she was employed. This is but a mild example of the extent to which the fanatical belief in mental age efficacy has extended. Such an occurrence does not come out of the clear sky. It can only happen as the climax of a long pursued and well developed attitude or policy. The great value of the Binet scale has completely filled the mental horizon of most of those who have been applying psychology. At present the need is definitely for a per-

spective that gets far enough away from concrete testing demands to see mental age in its true relation to other factors. To achieve this, we must study another aspect of present-day practice in psychology. The general problem of intelligence testing and psychological diagnosis was most emphatically influenced by the World War. Whether psychological tests as a part of the program for the selection and study of recruits really had any effect upon the winning of the War, it would be hard to say. But there can be no doubt but that the war usage of tests had a tremendous influence upon psychological testing. We now know, at least, that intelligence level bears a definite relation to the selection of trades and occupations and success in them. There may be many exceptions to the general uniformity of this rule, but the tendency is one that has been specifically proven.

The median mental age as obtained by the army examination of 1,500,000 men was approximately thirteen and a half years. Marked difference was found in comparing this with the level of negroes and foreigners. Needless to say, such an enormous number of men was not examined by any individual usage of the Stanford or any other test. Instead, the urgency of the situation demanded rapid handling of large groups of men, and group tests resulted. Most of the army ratings were based upon one or the other of several alternate group tests developed for this very purpose, the Army Alpha and Army Beta, as they are usually called. Sufficient work was done with the Stanford to correlate the ratings on the group tests with mental-age findings and to make possible a mental-age evaluation of the individual scores on the group tests. Such individuals as deviated in extreme fashion from the general group rating were then given the individual tests before their disposition was finally determined. Undoubtedly some such a plan was sufficient for the purpose. The aim was the

study of a large group of men from whom *the most probable* deviates, the least reliable, had to be eliminated. Minor differences were lost sight of in the vastness of the enterprise. The whole movement was one in which the problem was viewed from the perspective of group results. Those in charge dealt not with men but with tables, distributions, frequencies, means, and variations. The individual was but a pawn, a symbol of the minimal unit, in a game of thousands and millions. True, no single person was eliminated without some consideration as an individual, but even that was given more as a means of establishing statistical and scientific validity than because of interest in him as a human being.

In other words, just as war itself is an immolation of individuals, a sacrifice of units for the ideals and principles of the whole, so psychological procedure during the War lost sight of the individual in the strenuous attempt to deal with the demands of such a vast group problem. If the problem had stopped there, it would have been bad enough, but the force of example and precedence of training have followed the men so engaged back into civil life. To-day we are probably at the height of the aftermath of this period. Nearly all psychological interest and attention is focused upon group testing and new group tests. The sense of power which may be so readily gained from dealing with large numbers has made pleasurable the survey type of mental testing, made it possible to achieve striking results rapidly, lends itself to statistical treatment, throws no onus of blame on one if a case which does not fit is "discarded," and leads us—where? To answer that question, we must see first what group tests have accomplished.

The group test is no longer a single species in its development. This method of handling individuals in the hope of solving some of their problems has spread rapidly into every aspect of intelligence, psychiatric, educational, and

vocational problems. In some of these fields there can be no doubt of its advantage and finality. We educate in groups, our aim is the general fitness of the group, the material presented and the methods used must serve the purpose of the greatest possible number in the group, so why should not a group test in any subject, history, for instance, show where the group stands, its characteristic weaknesses and good points? The better and poorer scores may well help a teacher to an understanding of her pupils as well as to an impersonal measurement of what she has given them. Arithmetic, English, spelling, and reading tests are equally obvious in their application. But even the person little interested in educational problems can see the fallacy of giving such a history test to pupils who have not studied history or to adults successful in other ways, but actually disinterested or even uninformed on that subject. Any such test has a specialized place and must serve a specialized purpose only, or its application becomes illogical and even absurd.

Of course, this seems easier to understand than when we apply the same principle of selective usage to the giving of mental or intelligence tests. But there is a radical difference. True, intelligence is at the bottom of all we do. Because of this, we are, in a certain sense, justified in testing intelligence under any circumstance to get the part it plays in what the group is doing under existing conditions. Consequently, group tests of intelligence are as logical as arithmetic tests or history tests. In a certain sense, yes; in another sense, emphatically, no. To go back to our former illustration, when one gives a history test and finds one child far superior to all the rest and three or four hopelessly inferior, no one would ever think of diagnosing the future life success of the group in relation to the results on this one test. At the most, we would predict that A might make a good historian, whereas D and E and Z

obviously would not. Yet we know that in history instruction these children have fared similarly.

Intelligence testing allows of even less generalization. Intelligence at any one time is a product value, and many factors enter into it. It involves every experience of the individual to date, his physical handicaps, his environment, heredity, earlier education, especially in habits of thought, his emotional life, particularly his feelings or attitude towards himself as an individual and as a part of the group. No two individuals can be found, no matter where we search, for whom all things in life have been equal. To measure a group of fifty on general intelligence, therefore, means measuring fifty sources of absolute variability. Yet, when results are obtained, the mere fact that we are trying to measure *intelligence* leads on to a more or less inferred translation of our results into diagnosis ratings. Not only this, but the ideas of feeble-mindedness on one hand and superiority on the other are seldom far distant. To a certain extent such ratings are permissible, but it is the *finality* with which they are applied that must be criticized and, if possible, eliminated. Group tests applied in schools, universities, or prisons are no more a measure of the individual than they were in their war usage. They measure individual ability to fit into a demand made upon a social group. This is a vital part of normality, if we may define it as the ability of the individual to direct his reactions to the accomplishment of a group purpose; but the study of intelligence really means far more than this.

To begin with, not all human achievements are easily measured by an abstract type of test, and we must bear in mind the fact that it is highly probable that an individual scoring low on a certain situation or test demand may meet other equally significant situations well. Again, many normal individuals do not do well under group conditions. Competition stimulates one, but distracts another.

No one has really ever settled the question as to whether it is the individual who fits nicely into the demands made upon the group that is of the most value to humanity. It seems highly probable that he is not. The individual whose thinking, although precise, logical, and systematic, is different, who achieves distant ends by efficiency of mental activity, and who has different ideas, may well fail in group tests where even the answers desired are indicated in a prescribed form, yet he would undoubtedly, other things being equal, have far more chance of contributing positively to human progress. The writer cannot but see the short-sightedness which leads to any attempt of diagnosis on such a basis. Group tests have their place, a very definite, time-saving place, but, on the other hand, one with certain limitations which have been, up to the present, almost unmentioned.

The group test of intelligence is but a telescopic method of getting the first survey of a situation. The obvious deviations from group performance will show up readily. These will be at both extremes of the range of ability. The final categorizing of any of even these marked exceptions is, however, not the proper function of a group test. The very name indicates the purposes to which such tests should be limited. They subserve the study of groups, relative ranking in the group, comparison with other groups, planning for group handling, and may well indicate those who vary most and most need other explaining. So far, so good. But when the result of a group test is used to definitely determine the present and future disposition of an individual *with finality,* it is being used without bounds. The group test is a survey method, a means of getting broad relationships; its function might justly be related to social psychology. Diagnosis, the application in definite form of accepted terms which indicate the intelligence of the individual, is the function of clinical psychology, which might

definitely benefit itself were it to accept the protective designation of individual psychology.

Individual. In that one word lies the keynote to all of the ideals of clinical psychology. The very term "clinical" originally meant "at the bedside." This, as one may rightly infer, meant individual observation. It has never borne any connotation which would justify the assumption that when applied to the province of psychology it should suddenly come to mean rapid-fire group handling. Clinical psychology is the psychology of the individual with attention focused upon those attributes wherein he most markedly differentiates himself as an individual, with the goal-idea of more definitely understanding him and his behavior. The near future cannot help but bring a general realization of the fact that psychology must fit itself into a steadier, less spectacular, more tedious study of human problems if it is to achieve anything of lasting importance. A mariner climbs a mast and quickly sights a far-off shore. Yet that brief sighting knowledge does not advance him towards his goal. Hard painstaking sailing of his ship alone does that, although the sighting *directs* his course and makes each move more purposeful. It is practically the same with clinical psychology. Group tests may reveal problems. They cannot settle them. The solution lies in the careful study of the unit of problem-making—the individual.

Perhaps it is best to realize right here and now the difficulty of that problem. To study an individual clinically is not a matter of a few minutes, not the simple application of one test or one test series, not the mere following out of procedures formulated and laid down in books. There are more possibilities in any one human being than can be classified through terms of mental age, and justice in handling him demands the searching out of all of these possibilities, so far as skill and time allow. This means, in brief,

an understanding and intimate knowledge of the individual. Such knowledge is facilitated by tests one can apply, but it is dependent primarily upon an open-mindedness which sees more than test findings. "Too much time!" you exclaim. Is this actually a just criticism? Group tests are more rapid, handle more people. Do they *settle* the problems presented by those in the group? Very seldom. The problem is an individual one, often overcome in group work because the individual is living up to the temporary demand made on him as one of the group. Only two groups of extreme deviates are apt to find this impossible. They are the definitely feeble-minded and the definitely insane. But what of others who do not belong in either of these groups? What of the intelligent person suffering from fears or desires which practically negate purposeful living? What of the chronically depressed individual who is making no use of definite ability because of some distorted idea which the simplest analysis might aid? What of the high-scoring individual who is "immoral," a "pathological liar," a truant, a thief, a "brain-storm" disturber of community peace? What of the child who is "bright," but annoys the teacher and disturbs the group because he "cannot concentrate"? Do they need individual study and help? Is it worth while putting the time of a normal individual on them in the hope of salvaging a few for more normal living? In every sense of the word, yes. The problem varies from case to case, yet the urgency for the study of the individual is always the same. *The unit of trouble is always an individual.* Perhaps a brief consideration of a few individual problems will reveal this more clearly.

One of our most common problems is educational retardation. Ten, twenty, thirty per cent of a school grade may be below what they should be doing by chronological age, or even by mental age. Yet the problem is not one to which we can apply any general recipe. Talking with the teacher

is sufficient to demonstrate this. Despite the multitudinous demands upon her, she sees plainly the variety of forces at work. It is only illness which has kept Margaret back. Henry has been handicapped by learning our language. James has had to lose a great deal through deafness. Sam, John, and Willie she cannot explain, they are just "slow learners." Even such an unscientific investigation shows us the absolute necessity of handling these children with individual consideration of their own problem in relation to their peculiar handicaps and disadvantages.

Dependency is a different matter, you suggest, and the truth of such a remark is obvious. We usually handle the problem as a family one, but nevertheless it is still an individual problem, individual in a two-fold way. First of all, the individual family must be handled according to its needs, not in some mechanical routine fashion. Dependency due to illness of the worker or to lack of occupation because of special trade conditions is a very different matter from dependency due to alcoholism, inability to hold a job, a habit of dependency, family desertion or any other of the many situations which the practical worker can suggest for herself. But, nevertheless, the problem is individualistic beyond this point. A father who has failed to leave his address, a mother ignorant of any method of livelihood, a child needing nursery care, and two or three in school cannot be handled as a unit. It is a physical, let alone a practical, impossibility. So once more we resort to the consideration of the individual as the final unit of our analysis, although we adjust our individual solutions so that they may form a coherent group which disposes of the problem for the whole family with the least possible duplication of labor and expense.

Delinquency, too, may often be thought of as a problem of the group. A "gang" steals, breaks and enters, annoys the community. The offense is a group matter, justice in

its blindness demands similar punishment for similar offenses and sentences all of the group alike; the individual is not obviously the court's problem. Again, from the standpoint of offenses, delinquency is a group problem. Truants form one group, murderers another extreme, all degrees of offense against the law lie between. Laws mete out punishments for the groups, although some variability is allowed and individuality has won definite recognition in some instances. The murderer proven insane is treated in the light of his disease, not as the deed demands. The juvenile court more frequently recognizes this individual lack of responsibility, but even there such recognition is the exception, not the rule, although in the final analysis of even court procedure all cases must be handled as individuals. Any gang has its leader, whose motives are his own. His followers may be sheer imitations or excited sympathizers drawn into anti-social behavior for one of hundreds of reasons. The feeble-minded member who most frequently gets caught (and who is caught because he is feeble-minded) deserves to be treated, not as an example to the rest, but in the light of his individuality. The probation officer knows full well that the same probation conditions never fit two cases in exactly the same fashion. His practice recognizes individuality even where law does not.

Let us generalize our viewpoint a little more and take the matter of diagnosis itself. The body is an intricate organism whose functions and organs are fairly well known. Physicians, working with such definite knowledge, must essentially diagnose each condition of each patient before attempting treatment or medication. To the best of the writer's knowledge, their examinations are never other than individual. In times of great stress when hundreds must be examined, the end is achieved by the development of systematic efficiency in the handling of cases and the elimination of all observations save those which are absolutely

necessary. The central nervous system, as compared with the body as a whole, is an uncharted sea. Its potentialities for variety of function, alternation of reactions, and abnormalities of behavior are so much greater than those usual to the body itself that the condition in the individual can be predicted with far less certainty. How then can the study of it be other than individual? Only thus can the varying factors in the situation which have caused the behavior problem under analysis be evaluated with the least semblance of justice or accuracy.

In the same way, corrective work must fit the individual's needs as they have been diagnosed. One may rob Peter to pay Paul, but one cannot depend upon the diagnosis of Peter as of any aid in the treatment of Paul. Psychological treatment is not a matter of drugs or food. It is a matter of habits of learning and forgetting, of ideas and feelings. As such, it must build upon the structure there, relate to the environment in which recovery is expected, and keep its awareness of the everyday life experiences as it proceeds. Nothing but individual work can meet such demands.

The negative aspects of the problem are similar. Punitive measures must be individual if they would be at all successful. When positive measures, that is, direct reëducation and rehabilitation, do not succeed, they must be reënforced by deterrents. No two individuals respond in the same fashion to such methods. That which fits one case is useless in another. The subject calls to mind two boys of thirteen, delinquents. One, a chronic thief, feeble-minded, yielded to a single smacking of his hand followed by fifteen minutes in a corner. Never after that, during months of observation, was he other than happily obedient. The other, *of the same mental age*, also a thief, but not feeble-minded, yielded neither to praise, rewards, confinement, work, group disgrace or spanking, but attempted good be-

havior and improved steadily in trying to live up to the manifold duties and the honor of the position of errand boy.

Even this brief mention of our chief problems reëmphasizes the thing we need at every turn. Not group tests, group reports, group ratings, but the understanding, analysis, and diagnosis of individuals are essential. This is the task which confronts clinical psychology. We need not worry about its acceptance. There is widespread demand for it, but: The work done, to be of permanent value, must meet certain definite aims:

1. It must be *scientific.* Work which does not live up to the best which psychology has to give is not acceptable. The trouble with most applied branches of any science is that, once the concrete procedure is evolved, the application of it continues in that form, disregarding new facts in the experimental field. Applied psychology dares not do this. Unless it keeps its course constantly corrected to meet the developmental changes in the experimental field, it will soon find itself untrue to what we know of human beings. It is almost needless to add that it must constantly correct itself by the findings in its own field, clinical psychology as proven in the clinic.

2. It must be *thorough.* In the study of such an intricate problem as that a human being can present, nothing less than absolute thoroughness is sufficient. It does not do to take chances upon this or that being the significant factor in his problem. The whole tendency of trouble-saving humanity is towards generalization and singleness of outlook. Clinical psychology is one field where such a tendency handicaps to the point of failure. In certain cases there may be one point of such importance that handling it alleviates the crisis, but this is the exception. The greatest problems are apt to be those where no one big cause stands out asking for removal, but where a multiplicity of

small items, each so easily overlooked, makes the total situation.

3. Work of this sort must be *preventive*. It will not long content a busy world to have careful and even exhaustive studies of its bothersome members unless such studies prevent future bother to the same degree. Of course, the most valuable work is that which prevents recurrence of the event in the same individual, but if this is impossible, we must at least meet the demand of preventing other similar occurrences in other individuals.

4. Whenever possible, the work must be *corrective*. This is not necessarily an outgrowth of the attempt at preventive work. For instance, one may prevent further development of delinquencies in an individual by shutting him up in an institution. Correction is an entirely different matter from a term in residence at any institution. Our constantly returning repeaters give definite evidence of this. Almost any corrective, disciplinary, or industrial school for delinquents has cases who have been sent there three or more times. Corrective work means that our psychological study has in some way found the cause of the earlier disturbance and has handled it in such fashion that the probabilities of a recurrence are low. This is not always possible, but it is the next necessary step to be attempted when our examination shows that the individual is mentally responsible.

5. The work must be *educative*. A diagnosis from a psychological laboratory, written or verbal, means absolutely nothing except statistics, or a nice annual report, unless the significance of that diagnosis is definitely lodged in the minds of the parents, guardians, teachers, probation officers or others necessarily involved in handling the individual. It would not be hard to state specifically from one's own experience more than one instance wherein this point was absolutely ignored. Just recently, happening to

be interested in a youngster involved in a rather unusual escapade, the writer helped make an opportunity to have the whole group mentally examined. The judge so ordered it. The examinations were made. Then the disposition of cases was settled before there had been any chance for the examiners to report the findings to the court. Need we point out that the clinic procedure, time, energy, interest, and expense were lost because the judge had not been sufficiently educated on this point? To most individuals practically concerned with such deviates a diagnosis means next to nothing. What they need to know, what they want to know is *what to do.* The diagnosis is an abstract summarizing which may mean something to the psychologist but which has little of tangibility to the practical workers. They want the help on what is to be done now for this person, how to do it, with the least cost, the greatest amount of good, and the greatest chance of permanence. Then, they wish to know what shall be tried next in case the first plan fails. The psychologist must meet this educative demand.

6. The handling of an individual must be *economical.* That is, it must be as rapid and inexpensive as possible. This means keeping one's own perspective of essentials and non-essentials in each case, adapting to emergencies, keeping to the urgent trail in the midst of pleasant abstruse side problems. It means absolute knowledge of essentials and fundamentals in order to avoid non-essentials.

Now, naturally, the work of any laboratory reflects the attitude that laboratory takes towards all of these problems. The probable success with which another laboratory may take up the same methods and study similar cases and achieve similar results depends upon the completeness with which this attitude, the steps by which the problem is attacked, the methods, etc., are known. To this end they must be available in research reports. The need for this is

rather urgent, for we have no such a statement, or even a summary of general principles of clinical psychology, which may be referred to as the basis of work which makes different studies comparable, or which may even be used as a basis for critical differentiation of method.

Within the next ten years we may well expect much of conflict and difference of opinion on the same subject from workers in different laboratories and different localities attempting to work out clinical problems. Much of this will probably be due to the fact that there have been unnoted factors in the two instances which have differentiated the results obtained, but which have been disregarded as of concomitant value with the facts as reported. The only way to avoid a great deal of this is through refinement of technique, better training of workers, more detailed statement of conditions of research and study, with more complete presentation of data, and with a very distinct separation of data from the interpretation thereof. To this should be added practical suggestions and self-criticisms on each study made, for the research worker should be by his own work the best fitted individual to critically suggest improvements for the next worker who may attack a similar problem.

It is for this reason that the writer feels it necessary to formulate in definite statements the attitude, methods, and principles upon which was based the work at the Bureau of Juvenile Research, Columbus, Ohio, which has given a goodly share of the data herein used. The whole problem of psychopathy as the concept has evolved through this work is so inextricably bound up with questions of method and technique that one could not, in justice, be presented without the other. Indeed, it may well be said that no detail in the handling of a laboratory of clinical psychology is too small to finally have its effect upon the character of the diagnostic and educational work done therein.

Such a brief outline can but show up the immensity of the problem confronting us. If clinical psychology is to be other than Binet testing; if it is to live up to the possibilities it now presents and the handling of problems for which it is ready, we need to formulate in definite terms the ideals and principles which will answer the question "How?" There can be no question of the need or value of such work. Roger Bacon pointed out many years ago that one individual is of more account than all the universals in the world. Psychology in its attempt to help social progress must inevitably recognize this and, formulating the task, can only repeat the question, "How?"

The experiences and applications of psychology which have brought this question have also brought the beginnings of development which will answer it. The same war experience which gave such tremendous incentive to group testing gave another less well understood but valuable contribution to the experiences of those working at camp testing. The psychiatric division of examinations was usually run side by side with the psychological work. In some instances there was definite interrelation of observations. This could lead to but one thing—the realization by the psychological group that there was something else in the study of human intelligence besides the ascertainment of the level of intelligence. Mental disease became at last a practical possibility. To a certain extent this line of interest seems to have continued since the dissolution of army diagnosis. Woodworth has attempted a standardization of symptomatic questions, and the newer literature bears frequent reference to "character," "personality," and "temperament" diagnosis. Upon analysis, all of these studies seem to be rather definitely attempts to account for those factors left unevaluated by mental age or other graded ratings.

Nor is this the sole indication of discontent with or criticism of present-day test procedures. Perhaps the best indi-

cation of the psychological pulse may be found in the studies reported each year at the annual meeting of the American Psychological Association. Reviewing these for the last three years is most enlightening. There are not unqualified claims for test validity, no spectacular reports of age-old problems solved by the study of one aspect such as mental age. Instead, we find Gesell reports a boy with a seven-year mentality earning his living. Doll reports the mental age of successful army recruits as far below anything we had estimated. Bronner reports great variability of scores by the same child on various tests. We could enumerate indefinitely, but the illustrations given suffice. They mean that we have entered into a more rational period of critical testing. Attention is being focused more and more upon methodology and upon the validity of the findings in individual cases. More and more of our workers are coming to see the need for completeness in detail and breadth of vision in clinical work.

A radical change? Yes, and one we may be very proud of, although it is not a matter of blame or condoning that it has taken ten, eleven or twelve years to see this need. In 1911 the laboratories for child study were few and far between; about seven well developed ones were located in America. Ideals were still largely influenced by what the experimental psychological laboratories attempted in their study of adults. Few workers were trained sufficiently well to handle both their psychological procedure and children to whom it must be applied. The idea of research into heredity was in its first beginnings at Vineland, and still absent elsewhere. No practical value had come out of such laboratories so that the need of their help was not felt by courts or social agencies, and they consequently received no stimulus from these sources. Social investigators had not grasped the idea of studying heredity and family situations intensively in our present-day fashion. The

tests which were used comprised the Binet, the Goddard adaptation of the Seguin formboard, the now-disregarded Norsworthy and DeSanctis series. Educational tests were largely a matter of future development. Medical research laboratories were but beginning experimental usage of such tests as the Wassermann.

Is it any wonder that the results achieved were partial or faulty? Indeed, it is rather a matter of surprise that the work done was so fundamentally true in theory that it stimulated and provided a wholesome foundation for our present activities. The worst we can say of the work of these ten years is that it was narrow, bigotedly assertive of its own value, and often attempted by those entirely lacking in proper training for it, whose efforts were accepted because they were better than nothing.

Of course, all studies are always more or less one-sided. The teacher sees problem children as wilfully "not concentrating." To the physician, it becomes a matter of malnutrition or tonsils and adenoids. To the social worker, the same problem is explained by heredity, "his father is nervous." One probation officer finds environmental handicaps at the bottom of his problems, while another blames it on the movies. The psychologist has added his explanation of many of these problems. His only fault has been in not having enough variety in his explanations and in making the few he had fit all crises which confronted him.

Just now the whole matter of clinical psychology or mental tests has reached such a state of complexity that no one individual can hope to know the entire field thoroughly. To even keep a just, yet critical, perspective demands a formulation of the subject in general. This is especially necessary if one is to attempt any correlation of the various test movements into a body of facts, beliefs, and theories which will be utilizable in everyday practice.

CHAPTER III

PROBLEMS OF TO-DAY

The psychological clinic, in the sense that it is a diagnostic agency, has so far reached no obvious goal. Perhaps it never will, for changing needs of the race may well make constantly changing demands upon it and thus perpetuate it with constant change of function. But regardless of this, the aim of clinical psychology will always be the same —the elimination of those problems upon which its existence depends. In this it shares a common aim with other agencies of social service. Its own particular problems are different. That is its reason for being and for continuing, but like all social service, it aims at such perfection of the human race as will make its own existence unnecessary. Impossible and idealistic though such an aim may seem, yet bearing it clearly in mind may often aid in the final decision as to how a certain problem must be handled. Distance of perspective enables one to rate more nearly at their true significance problems which, because of their immediateness, loom so large they seem more difficult to handle than they actually are. We cannot formulate in any way what the future of the race may be or what individuals may sometime become. Conscious direction of human development is therefore impossible. All we can do is eliminate faulty or wrong tendencies as they appear. The thing demanded of clinical psychology is a study of human deviations, of behavior anomalies, with an explanation of them if possible, and an attempt at their correction and elimination. Being partaker in a common aim means sharing that ideal with other agencies, indeed with all others who hold

it. The clinical psychologist is not a perfect being, capable of settling human destinies alone. He needs the aid of the physician, the lawyer, the nurse, the teacher, parents, guardians, and institutions. Or rather, to place him meekly where he belongs, he must give his bit to help in the general solution of a problem where none may claim the final good achieved as his, but where all work together, losing the idea of claiming credit in the intensity of service demanded.

The problems needing solution are many, and we may well pause a moment to review some of them from the psychological standpoint.

To begin with, there is but little doubt that for years to come we shall be confronted by a steady demand for mental-age rating. In many cases the social agent who is not a psychologist will not soon be ready to take up much more than this. Since clinical psychology itself needed from ten to fifteen years to partially assimilate this aspect of intelligence, we cannot expect related fields, using psychological findings incidentally, to grow as rapidly into demanding other than readily grasped fundamentals. They must develop a more varied appetite for such findings. But despite this the ascertainment of mental age must sink gradually into a routine preliminary to more refined methods of studying the individual to determine his own special problems. However, not even the detection of the feeble-minded should be determined simply by the application of any one such test method, for mental age inferiority is not by any means an infallible indicator of feeble-mindedness. Actually, the subservience of mental-age findings has already begun. Several years ago it was no unusual thing to meet the educational need of the precocious or very bright child by promoting him to the grade where his mental age ranked him, regardless of the obvious lapses in his academic acquisition thereby involved. Such ventures are less openly

advocated to-day. Gillingham of the Ethical Culture School of New York, has pointed out some of the fallacies and consequent problems of such disposition.[1] The bright child in advance of the group where he belongs by reason of his actual age is very apt to be poor in muscular control, inaccurate in details, lacking maturity of judgment, giving symptoms of a neurotic nature, and frequently presenting moral problems. Experience cannot but generalize these findings and gradually bring caution in applying mental-age findings.

The more complex problems which clinical psychology must meet are numerous and deserve at lease enumeration before we formulate principles which must be broad enough to give us the right approach to them.

For several years immorality and feeble-mindedness have been linked together as almost synonymous terms in much of our social-hygiene literature. A common, and yet spectacular, way of stating this has been, "How many illegitimate children must a girl have before she has proven she is feeble-minded?" The answer has usually been inferred as "one." But that does not tell the story of immorality. The ten years just ending have seen the overemphasis of the relation of mental inferiority to the problems of feeble-mindedness and immorality. There is a broader relationship which has been emphasized by the work of Jung, Adler, Ellis, and the Freudian school in general. An illegitimate child is but an episode in the problem of immorality. In itself a definite proof of the breaking over from conventional bonds, its cause can, in the individual case, be determined only after careful study. The over-love of father, mother jealousy, self-assertion, self-negation, hysterical ideas of religious compensation, a deep-seated sense of inferiority, these are but a few of the possible reasons for

[1] Anna Gillingham, "Superior Children—Their School Progress," *Journal of Educational Psychology*, September, 1920, pp. 326-347.

behavior which we call immoral. The illegitimate child is but an accidental expression of this abnormality of behavior. True, it may be that the girl of less intelligence is the one who is more frequently caught. Her more intelligent sister expresses her abnormality in a way less directly related to the natural act of intercourse and with less probability of resultant conception. Not all immorality is so obvious, so simple, so closely related to the problems of everyday living. Nothing in life is too far distant from the sexual urge to bear a definite relation to sexual needs and desires. Consequently, the abnormal in sexual cravings—immorality, as we call it—may well find its expression in the most remote type of thought disturbance, with later behavior symptoms. Two years ago the writer had temporarily under her observation a girl who had been afflicted for over two years with seizures seemingly of an epileptoid nature. She was sixteen years of age and on all tests scored practically normal. There were no marked physical handicaps. The judge had sent her in for study. She had had no settled home but wandered from relative to relative and there was grave danger of her developing some actual delinquent tendency simply because she had the opportunity. A careful study of her association of ideas revealed definite sex interest dominating everything. Continued observation led to the revelation of the truth in the third interview. She had been immoral and her first "spell" had been coincident with the first sexual experience. Analysis eliminated the whole complex. Two later spells came at times when the desire to attract attention from boys had been thwarted, then even these ceased, and it has been a matter of nearly two years since there has been any such an indication. This does not mean that the girl is "cured." The spells were simply the form of expression found by an unstable organism in whom desires and laws conflicted and where there was sufficient intelligence to give a sort of realization of

what "thou shalt not" really meant. The tendency to immorality is but a symptom of something wrong, and this wrong is not necessarily feeble-mindedness and does not necessarily express itself in a fashion which is obviously conclusive. The symptoms of such cases must be studied and analyzed back into their motivation, and the reason for the motivation must then be subjected to a careful scientific scrutiny. The determination of mental age or any one other factor is not enough.

Another problem which must engage our attention is that group of individuals whose distinguishing difficulty is a flight of some sort from the place where they are supposed to be. Truancy, nomadism, fugues, split personalities, some hysterical attacks, all are expressions of this desire. The group is heterogeneous in the extreme, yet there is, behind any and all such varied behavior expressions which the desire assumes, a similarity of cause that justifies the grouping. Clinical psychology should find an especial interest in this field. In general, it is probably a sense of inferiority and inability to meet the situation which leads to flight, whether it be the actual headlong dash of the schoolroom failure into alleys far from the beaten track of probation officers, or the forgetting and partial living of a mind which dissociates those ideas, memories, and desires which distress it beyond endurance. In each and every instance the alleviation of the condition is by no means a medical, educational, or punitive problem, but first of all a search after the cause, the idea, or condition which has led to such distinctive and symptomatic behavior. Plenty of emphasis has been placed upon the child who is truant because of his inability to learn, but we seldom think of the possibility that a bright child might resort to the same means of escaping from boredom which takes five hours a day to teach him that which he could easily assimilate in two. These latter two are mental-age problems, pure and

simple, but that does not cover all the possibilities. A child may be so hypersensitive, tense, and nervous that the busy hum of the schoolroom is a rasping burden to his nervous system, and desperation may lead to any extreme in a search for peace and quiet. Again, a normal child, eager for the new and different, may philosophically weigh the chances and take the unknown path of truancy when a fortuitous combination of events makes this possible without too much premeditated planning. In like fashion, the wanderer, the runaway from home, the child who has spells of forgetting, the multiple-personality individual, all present problems in which the determination of motive is the keynote to handling and reëducation. The psychological aspect of the problem is the primary one. It is needless to admit that the individual exhibiting such behavior difficulties is probably handicapped by an unstable nervous system, that he needs building up and sanitarium or medical care. These are obvious possibilities. *But* the fact that the combination of body, nervous system, experiences, environment, and ideas, which make him the person he is, evolved this special way of reacting instead of some other very different one is the basis for our assumption that his primary need is psychological investigation.

The so-called temper cases are another group on whom no definite work has been done which in any way classifies them or explains the methods of handling them. Temper as a behavior symptom is undoubtedly dependent upon certain physiological changes, but aside from this the precipitation of any one seizure or manifestation is undoubtedly dependent upon exciting elements in the environment. It is consequently dependent upon the ideas aroused by such elements and is consequently a problem at least worth analytic research. The sudden venom of the attack of a paranoid personality is but an exaggeration of conditions we find everywhere from the back-fence freedom of vi-

tuperation in one district to the veiled and studiously polite hatred of a social feud in another. A temper outbreak is not a thing of ultimate consideration, but it is a symptom worth time put upon it for observation and study.

More obviously in need of attention is the group of those who lie "pathologically," who steal without need, and swindle with no idea of actual personal gain. Here no motive comes easily to light which can explain the time, energy, cunning, and self-troubling of a line of procedure which seemingly benefits no one. Healy reports the study of twenty-seven such cases in great detail.[2] According to his report at least nineteen of the twenty-seven are normal in mentality. He concludes, "The person who is seemingly normal in other respects may be a pathological liar."[3] Perhaps this might be considered a sufficient statement if one were studying the problem only from the standpoint of actual level according to mental tests. One cannot be sure of even this, for the study does not report mental age. In his summary, however, only four individuals are classified as poor in ability, and one of these is later reported as normal when the physical condition has cleared up. A reanalysis of the data Healy presents does not so conclusively eliminate the question of normality of intelligence. The majority of the group are verbalists, seven out of twelve writing compositions and stories. There is insane heredity in six instances, alcoholism in six families, criminality in six, suicide in one, syphilis in two at least, epilepsy in one, and in only two instances is the stock reported as normal. Although these traits, largely subject to inheritance, do not raise the question of feeble-mindedness, they do give us the picture of unstable stock with a high possibility of erratic development in the offspring. Healy reports mas-

[2] William and Mary Tenney Healy, *Pathological Lying, Accusation, and Swindling*, Criminal Science Monographs, No. 1, 1917.

[3] *Ibid.*, p. 266.

turbation in at least seven out of the nineteen cases and feels that it is a "very important feature in these cases."[4] To the writer, the presence of this habit is but another indication of a disturbed and unstable nervous system. It is a behavior symptom to be rated, not as a cause of the lying or stealing, but as another indication of a far deeper instability, relief of which, if possible, will modify both the masturbation and the lying or stealing. It is rather definite proof of the need of these cases for careful psychological study and an attempt at psychoanalytic relief plus every possible type of medical relief and correction. *If* our mental tests reveal nothing which distinguishes such an individual from one who is seriously and normally leading his life as a non-disturbing member of the community, it does not prove that these abnormally acting individuals are normal mentally; they cannot be, by our very definition of normality. It is definite proof, instead, of our need for more refinement in technique and for a definite extension of our psychological methods of appraisement.

Another problem, which means years of research, but which promises full return when once we begin to solve it, is the recidivist, that is, the delinquent or offender who offends again and again. In all probability our judicial and law-enforcing system, crude as it is, fits the comprehension of a great proportion of offenders and is sufficiently unpleasant, awesome, and threatening to scare many venturesome individuals back into the conventional lines of behavior. One can readily recognize the weight of a hearing before a judge, in all the formality of a court room, when the child is one to whom even scoldings or punishments have been rather rare. The child of fairly good parentage who "chances" into delinquency takes no second chance. His deviation from paths of right behavior is a *natural* part of his development. The *natural* consequence

[4] *Ibid.*, p. 260.

is adaptation to his environment so that the unpleasant side of such behavior does not have a chance to occur again. The abnormal aspect of the matter confronts us when we find an individual to whom the deterrent, which is seemingly emphatic enough for the greater part of the social group, proves ineffectual and the wrong or undesired behavior is repeated. Such an individual is abnormal in some way. He is non-adaptive or slow in learning, or low in ability to inhibit a habit once it is acquired, or else there is some ever-quelling source of stimulation to the undesirable form of reaction. Whatever one or more of these related reasons are fundamentally at fault in any one person, the need for psychological study is obvious. One need not spend much time considering the feeble-minded individual in relation to this problem. If the condition is one of uncomplicated feeble-mindedness, the delinquency is usually so obviously the result of undue demands made upon an intelligence that cannot understand them, that the censored act is the only logical reaction. A feeble-minded girl who did not yield to immorality under the bribe of money, clothes, or good times would be an anomaly. The imbecile, of any actual year-span, who did not steal when in need, would be equally rare. From the standpoint of the feeble-minded individual, delinquency is an accidental expression of his condition. The problem of delinquency as it involves relief, prevention, and rehabilitation of the delinquent is far more complicated a process than determining mental level. There is too much variability, over-lapping of deeds and the degree of their performance, too much erraticism unaccounted for when mental level is determined. Williams has given us our best study of this problem.[5] From a study of 470 delinquent boys, he concludes that it is the lower level of intelligence among delinquents which is "the

[5] Harold J. Williams, "The Intelligence of the Delinquent Boy," Journal of Delinquency Monographs, January, 1919.

chief contributing factor in their delinquent conduct."[6] He finds thirty per cent of his boys definitely feeble-minded and many others far below average-normal. He strengthens his conclusion that feeble-mindedness is an important factor by adding that, "Any level of intelligence lower than that of the average-normal accounts in part for delinquency, the extent to which it is responsible depending upon the degree of intelligence, which may be best expressed by the intelligence quotient." Despite this conclusion, he undoubtedly feels that there are other factors which must be taken into consideration, for he adds, "Delinquent conduct in persons of average or nearly average-normal intelligence may in some cases be explained by the inability of persons, through inherent weakness, to inhibit certain natural tendencies." It is this aspect of the non-feeble-minded, not-inferior-in-level delinquent which demands intensive consideration, especially when the delinquency repeats itself. What causes it, what is the inherent weakness, how does it cause what it does, how can we determine it soon enough to prevent delinquency in the individual case, especially in the case which promises, because of sufficiently high intelligence level, possible normality of life in the community if once started properly?

It is the not feeble-minded, not insane, not definitely handicapped child making continued demand upon the community for care, reprimand, inhibition, admonition, and repair of lawless damage, who is the especial challenge (and province) of the clinical psychologist. The individual who deviates so obviously from the group in which he lives that the average layman at least suspects his mental handicap is no serious problem from the diagnostic standpoint. He is one of the day's incidents. The intensity of his symptoms makes for ease of discrimination. It is the deviate whose deviation is just sufficient to cause behavior disturbances

[6] *Ibid.*, p. 181.

but not extreme enough to show readily the reason for his intolerable behavior who needs the most intensive study.

So far, the whole tendency of clinical psychology has been to emphasize the spectacular problems which it has met. The lesser problems of the children in whom conditions have not gotten to a point where the abnormal tendencies completely overshadow the normal traits receive but little attention. It is these very cases on whom a brief period of helping means the most for recovery, and they are proportionately so numerous that their correction is important as being a definite benefit to the community. Every one who has worked with children will recognize the various problem characteristics any group presents if they are but briefly enumerated.

Perhaps the most common problem is the child who "doesn't concentrate." This descriptive classification probably had its origin in the schoolroom, but the fitness of it is not limited to that aspect of the child's day. As a matter of fact, such a child *does* concentrate. The whole trouble from the standpoint of those working with him or responsible for his behavior is that he concentrates on the wrong thing. The child who doesn't concentrate, to use our identifying phrase, is usually one who is so excited by everything going on, so interested in what the other person (or class) is doing, so full of ideas that are only distantly related to the subject in hand, that he is overactive, tense, nervous, fidgety, "into everything," "never where you expect him to be." Reprimands fall with blunted points upon his cheerful equanimity and his ready, logical excuses for his behavior leave the average adult helpless. He is the decisive factor in the home, needing a type of attention and consideration which can hardly be imagined by those who know only ordinary children. He is a bane to the mothers of the neighborhood in which he lives. His alertness, rapidity of thought, and adaptation make him a

leader in his play group in many respects and under him the children lose their interest in peaceful, quiet occupations and run, race, shout, and scream themselves into extreme fatigue. The "run-away mind" he has been called and, objectively, this is true. His mind literally runs. His rate of ideation is so extremely rapid that he has passed by the consideration of a subject before the ordinary individual has fully grasped it. Of course he pays the penalty for his rapidity. Detail is neglected and there is the probability of much inaccuracy in what he does assimilate. He is usually a bright, even a precocious child, and the problem of saving him for a useful and normal maturity is consequently not only a relief measure to the community, but one highly justified by the child's own potentialities.

Another salvage problem is the bright trouble-maker, the child who without any excuse just seems to utilize his time to plan trouble. This attribute, too, is one which our school system usually detects before any other social agency has a chance to become definitely acquainted with the individual in a way which would reveal the tendency. Such a child is apt to differ in several ways from the problem type previously mentioned. He is usually able to avoid scoldings about his lessons, getting them easily. Indeed, it is frequently the too great ease with which he acquires a superficial recitative ability that gives him a chance to become a mischief maker. The first ten minutes of a study period see him conscientiously employed, virtuous, energetic, attractive. The remaining ten witness his degradation and the need for specialized attention from the teacher. The longer the period, the more spectacular is apt to be the result. Paper wads in the old-time country school, notes anywhere, pins in improper places, drawings of much significance but little art, talking, innumerable drinks, broken points to be sharpened, pinches, kicks, and fights are the result of idle time and usually of an idleness which

realizes that, because of lessons fairly well prepared, the danger of severe punishment is minimized. Dealing with the individual instances of this nature is a matter of schoolroom discipline, but analysis of the situation into the component parts and directing the substitution of good habits for those of trouble-making is a psychological task which will find ever-varying motives in the individual, and which must evolve the methods to be used in combating each special case.

Another educational problem will rapidly find its way to the psychologist, that is, the problem of the child who is "bright, but" who fails in some peculiar fashion to make his grade promotions. To put one's finger on the reason for this anomalous behavior is not a question of rule nor mathematical procedure. The probabilities are so numerous that it is almost impossible to predict with any assurance what may be back of the condition. Quite frequently the feeble-minded child has been described as the one who can get along passably on other subjects but who fails miserably on arithmetic. The non-feeble-minded child may have just this type of scholastic difficulty, the differentiation is not definite nor discriminative enough to be diagnostic. On the other hand, one meets frequently the problem of the child who is good in arithmetic but who fails in spelling or reading or who is handicapped by impossible writing. This condition is especially noticeable in some districts and seems to be definitely related to the methods of teaching reading used in the local school systems. Few teachers of the present day but have heard of the Aldine method of teaching reading, and many of them are enthusiastic advocates of it. From one standpoint there is every reason for this. The method teaches a certain text, verse, or story as a whole. The children gradually learn to identify the various words in it and then to recognize the same words in other word groups or sentences. The only thing necessary

for spectacular beginning success by this method is a good memory. Like Emmy Lou, reading is word perfect even with the book upside down! The difficulty lies in making the transference to actual constructive reading where new words must be worked out by letter values since the context is new. Many types of normal children have the greatest of difficulty at this point, whereas a child of the hyperactive group who cannot concentrate where the teacher demands is totally unable to learn to read. The *memory* habit not only does not spontaneously transform itself into a habit of analysis and word sounding, but it stunts or inhibits such an adaptive reaction to the printed page. I have just handled a precocious child who spent three years in a school under such a system and was unable to read even words like *it* and *has,* but who easily made up that deficiency in three months when aided by proper methods.

Naturally such a handicap means catastrophe so far as school advance goes. He who cannot read, cannot succeed in arithmetic, language, history or anything else above second grade. In some instances the poor habits just result in passing marks which indicate no real ability to comprehend the written page, and the result is an unhappy child in his teens with no foundation for any business or professional training. This is merely a lengthy illustration of one possible factor in such problem cases. It by no means exhausts the possibilities. The school system may be responsible, but this is not always the case. A small group of children, unimportant in numbers but definitely important as individuals, are undoubtedly true aphasia cases, that is, a printed word in one case, the spoken word in another, the written form in another has no meaning. The connections between seeing or hearing or feeling the making of the word as a sensation and earlier experience which should associate with it in such a way as to give it meaning are simply not there. Most of these cases are only partially

handicapped so that the realization of their handicap is delayed and makes the matter even worse by putting the wrong sort of strain upon a nervous system which is already definitely burdened. Again it is "poor memory" which is reported as back of the child's difficulties. Whether this poor memory means wrong habits of study, insufficient or wrongly handled study periods, fatigue due to insufficient sleep, poor feeding, overwork, or actual mental disease, careful study and case analysis alone can tell. The poorly oriented individual may be a miserable student in geography or history, yet succeed in life without this ability. In other instances the deorientation is pathological. The school world is full of such problems. Their solution demands wide orientation in the educational field as well as in clinical psychology. So far, we have but skimmed the surface of the problem here and there. The solution of it lies not in group educational tests but in individual, and hence, clinical, analysis of the individual problem.

Another problem, not so far fetched as it seems, is one of extreme interest which is only rarely referred to the psychologist, that is, the problem of the "lazy child." The parent or teacher who refers such a child usually comes eager for aid and counsel of a disciplinary nature. This, of all things, is the last method that should be tried. A lazy child is a sick child. His body is not necessarily giving any obvious indication of a wrong condition—and so the problem is seemingly one for intellectual solution. The writer has never found that a lazy child is other than a medical problem primarily, plus a need for the reëducation of child and family on this point and many others. Diet and medicine will not solve the problem unless the idea of laziness is effectively dispelled by the psychological examination and proof of ability and willingness to do *in accord* with actual physical ability are fully demonstrated. Nor is it only the lazy child who comes in this fashion to

the clinic. The "obstinate," "crying," "always complaining," the "clumsy," the "slow," are frequently referred in the same way by parents who can more easily tell some one else their problems than work them out day by day.

Modern mechanical toys and methods of amusing children, apartment-house homes, and many other factors of present-day living have brought another problem of child management which is usually difficult of solution. This is the problem of the child who is usually described as "not having enough to do." Recently, the writer had the chance to observe two children, a boy of two and a little girl of five, throughout a hot, tedious railroad trip of four hours. Given a seat apiece in the half-empty car, they were left to their own devices. Their parents, across the aisle, kept casual watch over them in between reading, sleeping, and talking. The children amused themselves, yet they had no toys of any sort, save a small feather triumphantly found on the floor. They stood up, slid down the backs of the seats, looked out the windows, talked, quarreled, made-up, and at one station where the older child wished to look out the window near her parents she asked permission, adding voluntarily, before she crossed the aisle, that then she'd go back. A twenty-minute lunch interval was used, without whining or fussing, to eat the food provided, despite the strangeness of the whole environment. Yet these were not children used to much traveling. Their behavior illustrates what is so often a lost art in raising modern children—letting them alone. The child who is amused, played with, given everything imaginable with which to occupy himself seldom realizes the resources within himself. This is not confined to the family where there is but one child, although it is a more frequent problem in such an instance. There are families of two, three, four or more children where the main object of the mother's day is to keep the children contented and as happy as possible. Naturally,

when this habit of dependence upon others for inspiration in play and the next move in the day's occupation accompanies a nervous irritability and physical instability, the resultant child behaves in a fashion that makes care of him little less than martyrdom, yet because such a parent seldom realizes that children may be reared otherwise, it takes time, parental education, gradual revision of the whole home attitude before relief becomes evident. The continual watchfulness necessary to avoid resumption of the old habits makes it even harder to keep parents following a procedure which will bring good results. If one could give a prescription of even sterile water to be taken every day, the orders would be followed somewhat conscientiously, but when one's "treatment" lies in advising an hour of self-directed play, making the child responsible for his own belongings, making him help with home duties, punishment (through loss of privileges) for disregard of certain fundamental rules of behavior, it takes every type of experience and a careful psychological appreciation of the parent to achieve results. Of course, if a clinical psychologist sees his professional activity as restricted to merely making a decision of who is feeble-minded or precocious, or if he is interested only in the case which brings a melodramatic story and lends itself to spectacular handling, he will find nothing pertinent in such a problem, although it actually offers a chance for preventive work that is more promising for permanency.

A very different demand upon one is made by what we may call the morbid genius. A bright normal child is, if allowed natural development, a joy and pleasure. There is a definite group of children, however, who show their unusual traits in a way which makes them a constant problem and burden. Although they are unusually intelligent, that phrase alone is not enough to describe them. Instead they develop peculiar ideas, monomanias, specialized fears,

queer solitary habits, moody habits of introspection and analysis. For instance, a child of three and a half who could read Eugene Field and enjoy him, who wrote and spelled correctly any word he had ever seen, and who tested over six mentally, centered all his energy for months on the fear that the world supply of paper would give out before he grew up. Another child of five, testing nine, expressed all of his lack of desire to live, his cynical attitude, his depression, in chants such as,

Life is a dark hole,
Life is a dark hole.

In such cases, the multiplicity of symptoms of abnormal ways of thinking are often so great that there seems no possible hope for normal adult life. In the case of the three-and-a-half-year-old mentioned above a diagnosis of infantile insanity was made by a prominent alienist. No hope of recovery was given. To-day, at eleven and a half, the boy is to all practical purposes a boy like other boys, with his own maturity and widely-ranged interests unharmed and generalized past that baby stage where intelligence, unpropped by experience, threatened his normality and had actually stunted his body into extreme frailty.

How the one grew out of the other was a matter of psychological aid and specialized education. The diagnosis in itself would have misled. It was the concentration upon possible alleviation of the condition that solved the problem. Surely the future cannot help but demand more of this analysis of a diagnosis into *things to do now!* What the results in general may be, it is hard to tell, but until we know more of what may come in such cases, a psychologist has no right to rest upon a diagnosis as a reason for neglecting all he can do for a child. The morbid genius, who is usually treated as a clinical curiosity, needs help rather than exploitation. *If* he can gain the necessary social consciousness which makes him able to relate his

special interest to humanity's needs, his future is full of possibilities.

A far more common problem, however, is the child who tests "at age," but who, nevertheless, cannot learn, cannot get on in school and who often develops behavior difficulties about the same time as his other inabilities are discovered. Such children have given indications of the complexity of the problem from the very first time a group of normal children were reëxamined on the Binet Scale. Goddard reported such findings in 1913.[7] In general, however, this fact has been ignored in most of the studies made. The individual possibility was lost sight of in the statistical probability. Yet in clinical psychology each or any case that comes before one for study may be the exception to the generalized probability! Doll and the writer have both reported case studies of such cases.[8] "Potentially feeble-minded" is the usual diagnostic term for them. These are the children on whom we realize the sad fact that our tests are not proof perfect of an individual's status. The child who now tests "at age" may have reached the limit of his mental development. Next year may find him one year retarded, the next two years, the next three years. He has run true to what we know of the normal pattern for intelligence growth, *so far as he goes.* In these children any diagnosis is absolutely a matter of clinical refinement. "Potentially feeble-minded" is really not a diagnosis only, but diagnosis (he is not inferior enough to be called feeble-minded now) and prognosis (other findings indicate inability to progress much further). The very need for, and formulation of, this term is sufficient proof of the inadequacy of mental age as a diagnostic method and of the need for every possible refinement in our testing methodology.

[7] Henry H. Goddard, "The Improvability of Feeble-Minded Children," *Journal of Psycho-Asthenics*, June, 1913, pp. 121-126.

[8] Edgar A. Doll, "A Case Report of Potential Feeble-Mindedness," *Training School Bulletin*, November, 1916, pp. 159-163.

The writer can but reiterate an earlier conclusion:[9]

There is something more significant than mere mental age or years of retardation, a something we seem to have missed in our numerically finished clinical studies. At two an idiot, an imbecile, a moron, and a normal may all seem practically the same. Then the idiot drops out of the race, stays at that level. Somewhere, in the next four or five years the imbecile falls behind, but the moron may be even ten or eleven before he evidences any real deficiency on our present systems of tests. Yet the difference has been there all along. The moron was as feeble-minded, potentially, at the age of two, as at twelve. The normal child was as surely normal. There is an innate difference hard to describe but all who know defective and normal children often recognize this qualitative difference before any quantitative test has demonstrated its presence. It seems as though with some the evolutionary nisus has spent itself with the effort necessary to bring into being, with others there is no energy there to meet the demand for speech, with others concrete stimuli can evoke satisfactory responses but there is not enough motive power to meet the demand for response to the faint stimulations made by abstract ideas, theories, principles, etc. But the normal child is entirely different. He lives only as an incarnation of activity. He is activity, innate, flooding, spilling with every new stimulus, responding with growth to every new demand made upon him.

But the mental-age relation to the diagnosis does not bear only this single aspect of deviation. There is also the child who tests below and who is nevertheless up to grade in school work. Nor does that end the problem. It is no uncommon thing to find a child who tests two, three, or more years below and who makes up part or even all of this retardation in a spectacular fashion when the cause for his retardation is even partially eliminated. How is one to tell when a child who is retarded needs the opportunity and will use it in recovery and when he has reached his ultimate intelligence height and is going to stay there? Our chronological age—mental-age relationship, that is, the intelligence

[9] Florence Mateer, "The Diagnostic Fallibility of Intelligence Ratios," *Pedagogical Seminary*, December, 1918, p. 391.

quotient—looks and acts just the same in both instances. There can be no doubt but that there is some innate difference impossible of detection by any such a measure. Only careful refinement of methods of observation will enable us to extend a statement of a child's ability *now,* as indicated by tests, into a prognostic evaluation of his future.

Closely related to this is the problem of the child whose mental age decreases. Clinic observation of this as an actual fact is a recent development. The history of a child having been far brighter than he is now has usually been taken with a large grain of salt, save in such cases as gave a definite paralleling history of physical symptoms. "The mother's idea" has been the usual verdict. Recent years, with the advantage of impersonal test observations, have shown us the possibility of such retrogression of development. A child may test two years now and one year in six months from now, or ten years now, when he is nine, ten when he is ten, and nine or eight or seven by the time another year or two have passed. Of course, such cases are rare, but they *do* occur and even if we found only one such instance it would be enough to upset any secure clinical applicability of mental-age findings in evolving prognoses. Mental-age findings are, as Binet himself definitely stated, a matter of the present moment; prognosis is reserved.

And then another problem confronts us, so-called child hysteria. Just how much variability the quims and quirks of a definite hysteria may cause in test findings, only research will enable us to state. It is highly probable that most of the children who test low but who seem comparatively normal in other ways may belong in this group. Is the hysteriac differentiated by mental age? Emphatically, no. Can he be distinguished by other psychological methods? Most certainly, yes.

Just what do all these problems mean for the future of clinical psychology, itself?

CHAPTER IV

THE FUTURE LABORATORY OF CLINICAL PSYCHOLOGY

THE enumeration of some of the problems which now confront a laboratory that claims to handle the mental and intelligence problems of the human race is, in itself, enough to show us that there is a future, full of work and promising possibilities, before him who chooses that way. Clinical psychology is being given its chance to help solve not only the obvious problems of feeble-mindedness, delinquency, and school difficulties but many of the more or less related puzzles of human behavior. The clinical psychology that shall prove itself able to handle these chances must be something else than a set of rules to govern the giving and evaluating of a few groups of tests. The very possibilities of the field and the opportunities it opens for future service emphasize the need of caution and conservatism in the use of tests, care in the making of diagnoses and in the interpretation of them into the handling of individuals. Confidence in the ease of the solution of psychological problems resolves itself into careful doubt and verification of findings. The very immensity of the field and the problems it presents cannot but overawe the ego of the most efficient worker and make him seek the support of more thorough organization throughout his professional group. This means a demand for refinement of technique, broadened interrelation with other sciences, further development of methods, establishment of the possibility of varying technique as conditions vary, and the encouragement of ever higher standards in the work of the profession.

Since the quality of work done and the attainment of any practical and permanent goal depend upon the definiteness with which all other aims are made to subserve this goal-idea, it becomes necessary to formulate those things which we are most definitely seeking.

Time so spent is by no means wasted, but serves in every way to promote later economy of time and energy. Just what needs most to be accomplished in clinical practice and how it is to be achieved must, of course, be formulated with a definite regard for practical issues. No one could hope to predict or outline in detail the work of the next twenty, or ten, or even five years. Any attempt made is necessarily partial and incomplete. The psychological clinician who feels himself capable of meeting the daily solution of the problems of his clientele will not recognize the need of such a formulation. Those who are still attempting more completely to organize their work and relate it to everyday demands will realize that practical issues need some such plan. Remember, however, the theories and practices suggested in any one formulation, such as this, may not meet the needs and beliefs of the individual reader, nevertheless they serve their purpose if they but form a basis for his differing, for he cannot differ logically unless he develops a plan and theory of his own.

In the first place, it seems well worth while to put into words some of the aims of the clinic itself. A psychological clinic, or a laboratory for the clinical study of human minds must in itself meet certain conditions and fulfill certain ideals, if the work done therein is to be permanent and worth while. The fundamental aim of any such clinic is an attempt to study the individual so that three things may be determined about him:

1. Whether or not he be capable of a normal reaction to the demands which are usually placed upon one of his age, sex, and environment.

2. Why he does not give a normal reaction if he be capable of it.

3. What shall be done with him if his disability is due to a defect, and his abnormality is not to be dealt with through modification of his environment itself.

If this three-fold aim is observed, the individuals studied in a clinic should, in every instance, be the better for having been studied, either because difficulties have been cleared up, or else because those who are responsible for them have been given help in the manner of caring for them, and the situation is, consequently, alleviated. Of course, there will be some cases where it will be impossible to change greatly either living conditions or the subject himself, but each such case should at least help in the general study of the problem, so that others may be better understood thereby. Alleviative and preventive work cannot help but follow in course of time.

It is almost needless to add that all such clinical work should be carried out with the utmost regard for the scientific aspect of the procedure and with constant awareness of the significance of each task as a part of the big, general study of human beings which will sooner or later render available data that will influence the future welfare of the human race and facilitate its progress. Besides these humanitarian and scientific ideals, the laboratory should have a certain personality in and of itself. Of course, this is a matter of growth and depends upon those who are in authority. A definite philosophy is needed to evolve the best of personalities, or "atmosphere," but much is largely a question of efficiency. The laboratory clinic must never forget that it is an agent of public welfare, for public usage. No matter whether it be an independent foundation endowed with many millions or a small, poorly equipped department of some little college, or a part of the political machinery of a state, the need for this attitude is the same.

Clinical psychology handles social crises and problems of the social group. As such an agent, the clinic is dependent for its very life and material upon the good-will and approval of that group in which it is located. The unfortunate side of many college and university clinics is that they are established without this attitude or without the goal-idea of service to the community. They are primarily a chance for the student to get practice in testing so that he may go out better equipped to do actual work for himself, or to teach other young men and women how to test in a similar establishment. An aim of helping the community, even if it were merely through the coöperative instruction of the parents of the better class in the university neighborhood, could not but be a tremendous incentive to thoroughness and accuracy in this practice diagnosis.

If one keeps the aim of social service in mind, many of the other problems of the clinic solve themselves. The arbitrary *I* of the professional expert modifies itself and stands in the attitude of offering help to the needy *You*. The urgency of the special demand over the telephone, the occasional request for testing on holidays, in unusual places, or at unusual hours are met with understanding and willing coöperation in actual proportion to the vividness with which such an ideal occupies the mind of the clinic worker. Gradually such bits of response to demand, or refusal to respond except according to the rules of the clinic, will develop up or down into the atmosphere of the clinic.

One cannot emphasize this too definitely. The general atmosphere of many social agencies is one wherein all human feeling is submerged into the definite insistence upon the importance of that agency. What a travesty is the term social service when applied thus! Yet more or less of this is seen in all such institutionalized aids to hu-

manity. Noon on Saturday ends the recognition of human needs until Monday morning. Five o'clock closes the ears of appeal until eight o'clock in the morning. Yet those most needing help can usually best give time to seek it in the evenings and on Saturday afternoons or Sundays. True service can know no such limitations.

A psychological clinic is run *for* those who come to use it. Those who work in it are *allowed* to help with the problems demanding study.

Those who are served are not necessarily the ones who pay salaries but those who furnish the work to be done, the public. It is more than essential that this attitude be enforced upon those who in the abstraction of the search for ideas are apt to overlook the rights of the people in whom they search for them.

In the ideal clinic, or laboratory of clinical psychology, there is no actual question of hours. They are a matter of necessity, but not a thing to be met as an absolute bar to working more hours for one's own pleasure in the finding of some item that will help solve the problem for some case or condition. Workers, to be able to live happily with such an ideal, will naturally sort themselves. The unfit will be uncomfortable and will search elsewhere. Propaganda will scarcely be needed by such a clinic, for each person helped will, with confidence, refer his acquaintances there when they need like service. Indeed, some families gradually develop the habit of coming, as to a friend in need, for general advice, or for reference to proper sources of other kinds of help, and, sometimes, they even come to try and pay back some of their weight of gratitude.

The question of how large any such a laboratory should grow is a serious one. In one way it may be easily seen that the larger the group working, the more data there will be for generalization. Beyond a certain point, however, centralization is difficult and seemingly a poor policy. The

writer believes that a fairly large city laboratory or clinic with moderate equipment can probably do far more good for the children in that city than a state clinic located a hundred miles away, or else, located in that city, yet, perforce, dividing its energies among many cities. A laboratory should be easily accessible, for not all parents can afford to take a day to visit every time they really want to talk over Mary or James with the psychologist. More preventive work may be accomplished by this closer focusing on the little problems of the cases near at hand than by study of the long-distance-brought incorrigible on whom environmental, family, and behavior data are difficult to obtain.

In the same way it seems as though any such an institution should be open with a good-sized staff on Sundays and holidays, even though it practically closes one or two days in the middle of the week. Coöperation with the home is an essential, and this may best be accomplished by having hours available when the parents can most easily plan to come to the clinic. Why not? Surely such work is as much for the betterment of the future men and women of the race as Sunday schools.

One other subject really should be mentioned and that is the necessity for an attitude of leisure in the work done in the clinic. No one can do his best if he is constantly worried with the idea of a vast amount of work awaiting him when this "task" has been completed. There are some individuals so built that the mere fact that there is a large amount of work to be done renders them incapable of doing anything but worry, regardless of whether or not there are a sufficient number of persons to share the work. Such an individual should never be placed in a position of authority in a clinic, nor should he or she be in such a position as to influence the attitude of others, for the psychic contagion of such an attitude is one of the

worst things that can befall a clinic. It makes for hurried, slipshod work in the individual who is just partially trained, for chance diagnoses, lack of consideration of details, overlooking of important items, misunderstanding of shy individuals, fatigue, and loss of nervous energy in workers themselves, and a constant atmosphere of irritability and tension. *You have all of the time there is,* is a splendid motto to hang, at least figuratively, in each room. Quiet work is more sure, accurate, swift, and more pleasant. It is less fatiguing and less dangerous in its results. Let us encourage the laboratory attitude of research and freedom from American rush in our clinical laboratories, as well as in those devoted to academic and philosophic research.

The psychological laboratory should be essentially a clearing house of social service. It is impossible for any organization of this sort to do more than exist unless it recognizes the forces in the midst of which it is working and seeks to coöperate with them. A definite part of such services is knowing what organization can do more for the individual than the laboratory itself, or which can best supply what the individual needs. The laboratory's responsibility may end with the giving of a diagnosis, but, ethically, the making of that diagnosis involves the responsibility of seeing that activities, treatment, education, and correction consequently needed are made inevitable. Otherwise the diagnosis is a useless bit of determination. It gains value only as it motivates care and becomes a determining factor in the avoidance of the repetition of like conditions.

One hesitates to discuss the trivial aspects of such a situation which should seemingly be obvious enough to function properly without mention. Experience shows, however, that this is usually far from the case. The psychological laboratory, no matter how well equipped, no matter how well trained its examiners, cannot afford to ignore the effi-

ciency of modern business. Poor utilization of space, long distances between groups of equipment which are usually associated in an examination, erratic methods of case assignment, poor methods of recording data, crude filing, inferior paper and ink, all take their toil from the efficiency of the finished work of the clinic and add to the difficulty with which it is done.

Another item is often unconsidered. To many individuals the only contact with such an organization is through telephone or letter communications. Mere matter of form to keep these efficient? Perhaps. There is no doubt, however, but that a telephone clerk making appointments, with the idea in her head that she is, in this instance, dictator for a big organization, and so arrogantly viewing the individual at the other end of the wire as a needy applicant, can undo all the socializing that the actual clinical staff of the laboratory attempts and more besides. The ideals of such an organization must, to reach any semblance of fulfillment, be understood, at least dimly, by every person involved in the work of the organization. Even the errand boy has imposed upon him a certain necessity of responsibility which is a part of the clinic for good or for evil.

CHAPTER V

THE CLINICAL PSYCHOLOGIST, HIMSELF

For many reasons we cannot help accepting the clinical psychologist, himself, as the real center of the clinic, even though he be but an agent in achieving its actual goal of diagnosis and human salvage. The clinical psychologist makes or breaks that clinic which he directs. This may seem to be an exaggerated statement. Psychiatric clinics are not so completely vitalized or devitalized by change in a chief. In years to come the psychological clinic may likewise find itself less dependent upon its director. At present the psychological clinic is young. There is no settled methodology, equipment, procedure, diagnostic terminology, or even system of case recording. If a clinic is new and unorganized, its very ideals depend upon the psychologist's ideals as he builds it. If it be fairly well established, he can either fit into its partially completed structure and grow with it, or he can spend his time destroying what has been done. Unfortunately, the attitude of critical professionalism is no more lacking in clinical psychology than in other fields. There is far too much of this destructive tendency. Actually, there must be some good in all careful work, whether we believe in its all-embracing efficacy or not, and so the acceptance of beginnings made, of suggestions based upon the experience of others, is one of the things we must require of him who would call himself a competent clinical psychologist. In other words, he must be broad-minded enough to be willing to accept work done by others, and intelligent enough to accomplish its utilization.

The question of *training* is a fundamental one. It is obvious that the danger is far more apt to be the acceptance of workers with too little training than with too much. This problem has so far had but little attention. Any one who has cared to do so has been able, in some group or other, to pose as an expert in diagnosis. Fortunately matters will soon be otherwise. The Association of Clinical Psychologists, which has lately affiliated with the American Psychological Association as a separate section, has been devoting most of its business meetings for several years to the correction of this condition. The probabilities are that the near future will see in actual practice the recently approved and organized certification of first-class psychologists as well as the partial recognition of those who are fairly well qualified to act as assistants.

But any such certification is merely a guard against charlatans and fakirs. It is no more a guarantee of ability to do actually good clinical work than a physician's license is a sign that he will be a successful practitioner. The things that can hardly be estimated in such a certification are of far greater value in the final rating of the worker as fit or unfit.

The clinical psychologist can never have too much actual education. All knowledge which one may have acquired yields its full quota of help in any attempt one makes to understand human nature. Those lines of study that deal directly with the psychology of the individual or the race in any of its forms are, of course, the direct foundation for such practice. A necessary concomitant is sufficient training in biology, and especially in physiology and neurology, to give the proper apperceptive background for the constant need of relating one's work to the medical aspects of the problem. Probably the other most closely related fields are those of education, or the effect of training upon the mind of the individual and the group, and sociology, or

the effect of the social group upon the individual. But the direct relation does not stop there. In the many ramifications of the human mind to be analyzed, recognized, and appreciated, each bit of training or experience which the clinician has but adds another item to the probable points of contact he can make with the individual studied.

He who knows mental tests and measurements as a course in the statistical rating of human beings by mental age has one aspect of the problem. If his one-track training has embraced nothing else, he can see the whole problem of human behavior so clearly, that its very clearness makes him dogmatically refuse other explanations or opinions. For instance, to him human beings must fall into some simple serial classification such as very feeble-minded, feeble-minded, backward, normal, bright, very bright. Disposition is then equally simple. Send the very feeble-minded to institutions, the higher-grade feeble-minded, too, in many instances. Let the dullards do the laborers' work. Push the bright ones ahead. The multitudinous articles and books representing this view solve social problems with equal ease. Criminality is due to feeble-mindedness, prostitution is due to feeble-mindedness. Most delinquents are feeble-minded. Slums are the homes of the feeble-minded. Just where the problems of the epilepsies, the psychoses, nerve breakdowns, and other equally serious mental conditions enter into such a scheme the writer is not sure. Undoubtedly the individuals advocating and accepting this mathematical and quantitative theory of mental life, or intelligence, know and recognize the existence of state hospitals, psychopathic wards, the criminally insane and other pathological aspects of their problem; but this recognition is not followed by any attempt to assimilate into their concept such diverse and disagreeably difficult conditions. These diverse bits of information occupy watertight compartments of their thinking life and run no risk of amalga-

mation. This is not an exaggerated statement of affairs. Any one who will search the mental-test literature of the last ten years can readily see how small a proportion of it even relates its subject matter to the question of mental disease.

How can such a person, one with this limited view of intelligence and the group mind, wisely handle a clinic where he must sooner or later meet these other problems? How can such a worker handle the acute mental disease which registers a low mental age? What does the assumption of great artistic ability mean to him if the mental age is normal? Can he see the possibility of a specialized defect making a child "test" feeble-minded when he is actually normal? Widened perspective is the result of great experience or wider education. Ideally, the clinical psychologist should be as able to lay his finger on each individual trait and classify it in relation to development of the individual, to hygiene, disease, racial evolution, and social restrictions as a botanist is to analyze a flower and categorize it. But when one is dealing with such ever-varying, complex beings as boys and girls, men and women, no one mind can hope to accomplish the impossible. One thing we may demand, however. The education of the clinical psychologist should be broad, and whatever it comprises in actual knowledge, a definite attitude should be insisted upon. This is what William H. Burnham has so aptly called the attitude of "intelligent ignorance." Let the clinician know thoroughly some part of his problem. By comparison let him realize his comparative ignorance in other allied provinces. Then, one further stipulation, let him have the attitude of being willing to admit the limits of what he does know. Binet realized the necessity of such doubt as to one's own diagnostic ability. Only the amateur is cocksure. Willingness to say "I do not know" is the definite test of the scientific attitude and of ability to serve efficiently. If we may insist upon this prerequisite of training and attitude, our

clinical psychologist is, we may be assured, equipped with much of ultimate value for his success. But other often disregarded factors are sufficiently important to deserve consideration.

The personality of the examiner is of constant significance. It minimizes or maximalizes all he attempts. It is far harder to describe an ideal personality than it is to enumerate types which are undesirable. In the writer's opinion the most dangerous type of person in clinical work is the excitable, overemotional, verbalistic worker who approximates the constitutional psychopath himself. Such an examiner, whether in charge of others or used exclusively for examining, is a source of constant trouble. The examiner's excitability overstimulates patients, irritates them frequently, fatigues them by demanding an excess of animation in minor situations. Unfortunately, this excitability is usually accompanied by excessive verbalism and quite frequently by a tendency unconsciously to exaggerate symptoms due to the emotional apprehending of them. The result is disastrous. Mental age fluctuates considerably both up and down. Symptoms of instability are reported in maximal form. The staff presentation of a case by such a personality means a constant need for reëvaluating in the light of the examiner's limitations. Of course, such high error in findings is far more apt to lead to diagnoses of abnormality than to diagnoses of uninteresting normality, and in the end it is the child who suffers.

Another type of worker who is even more destructive in another way is the antagonistic, but usually phlegmatic, person who refuses to believe any of the symptoms found. Such workers always give the child the "benefit of the doubt" even when there is no doubt. Children examined by such a worker are usually scored higher in mental age than general rating would place them. Their individual deviations tend to be minimized, and overconfidence in the

child leads to too frequent failure in handling him. The too-restrained, unemotional worker, indifferent to the case save as a part of the day's work, concentrating on the making of a record, is no less an evil. Here we find all visible facts dutifully recorded, *but* they remain facts. The brain of the examiner never adds of itself enough to change them into the coherence, and unity, of a diagnosis. Usually the conscientiousness of these workers makes for engraving-like beauty in their written reports. The mechanics of the task absorb all their energy.

A clinical psychologist of gratifying personality must exhibit less extreme a development of any one trait than any one of these three types described. The psychologist who would devote himself to clinical work must see in his profession more than the recording of processes and images such as the pure experimentalist records. He must relate the tiny items of the individual's behavior to the great and constant activities of the race itself. He must sense, underneath the imperfect bit of behavior which he sees, the world-old motivation. He must fill in the gaps, see through the blurs, and, impersonally, hold the perspective of the child in his relation to the social group, and of the group in its relation to humanity in general.

The child is "more generic, an oddly shaped bit with many angles and crevices which will later be smoothed into a sphere, the educated adult. Most of the extensions, the seeming irregularities, the deep scars in the child bit are not purposeless, but they are the growth of the ages he best represents. These features, usually so incomprehensible to the adult, must be the especial study of the clinician."[1]

How can one achieve this end? The ordinary adult would find it a hopeless task. Perhaps the best word to describe the attribute needed is tact. The clinician must be tactful,

[1] Florence Mateer, "The Psycho-Clinician: Personality and Training," unpublished A. M. Thesis.

not in the sense of knowing what is nice, proper, and applicable, but in the sense of being full of the ability to touch. He must explore, finding his way by delicate sense of contact into the utmost recesses of child nature. To do this he must in reality be plastic, mobile, able to flow around the child and to envelop him in a comfortable glow of camaraderie. He will not be able to do this unless he has in his own person kept near to child nature. He must live deeply and well, be sensitive to the slightest indication of life in others mature but not grown-up, unselfish in his interests, and have a certain faith in the evolution of man. All of this implies an actual love of or deep interest in children. His personality should attract children as well as adults. This by no means indicates the need for constant effusion over children. There must undoubtedly be a high degree of sensitiveness, but this must not develop into personal sensitiveness. What more there should be, it is impossible to state in terms of attributes themselves. They will show themselves as necessarily related to the work demanded of him.

Beyond personality, there is the question of attitudes. The psychoclinician must hold or not hold certain definite attitudes. He dare not be monomaniacal. Exclusive advocacy of any one thing spells failure in this field. Since he is handling human material, a variable something, he may not expect mathematical precision in the laboratory's function. A variable case means varying times of examining, varying completeness of findings, varying ease of diagnosis. Nor will a remote, academic attitude succeed in any more marked fashion than an oversuggestive type of handling. The worst sin of attitude, when scrutinized from all angles, seems to be that of perfunctoriness. A parent bringing a child for examination feels it a vital matter. The disinterested perfunctory carrying out of the examination makes a diagnosis useless. The parents are already preju-

diced against the examiner and, naturally, against his findings, so that when he makes a diagnosis they are not willing to accept it. Surely sympathy and understanding should show somehow in such dealing with humans!

Age and sex. Are they significant? Yes and no. The writer, perhaps prejudiced, feels that women, if equally trained, are far more apt to make good clinical psychologists. Psychology itself assigns to the feminine mind the greater interest in details. Clinical work is all detail, difficult to obtain and hard to patch together, needing seemingly just what women can best give. Besides this, there are the minor considerations of greater ease in handling children, the elimination of the sex attraction in adolescent girls, etc. Age has but one point on which it should be qualified. No matter how old or how young, the clinical psychologist should be one who knows how children and young people feel.

One other attribute really needs emphasis, and that is the general ability of the clinical psychologist to obtain a fair perspective on a case situation. The immature worker, knowing a little about feeble-mindedness, sees feeble-mindedness everywhere. The day she learns of epileptic equivalents she finds many such. This is a lack of critical perspective. A good clinician must be able to see not only the child in relation to the test findings obtained, but both of these in relation to the case history, environment, parents, lines of corrective handling possible, the law, and the community. Only in such a fashion may we hope to get a summarized perspective, that is a diagnosis, which embodies in it the possibility of remedying the condition or alleviating the situation.

The ultimate test of the clinical psychologist's fitness for the responsibilities he assumes in attempting such work lies in his relation to the patient he is handling. Some workers claim that the clinician needs a "commanding per-

sonality,'' but this seems doubtful in so far as the phrase refers to the obvious appearance which impresses the child or adult just coming into the laboratory for examination. Whether reserved, effusive, dignified, or natural, the great necessity is for the immediate development of a feeling of acquaintanceship and of mutual sympathy and understanding. The very worst thing that can happen from the standpoint of the examiner's technique is to have an adult come into the room with the child and tell all his delinquencies or difficulties to the examiner in front of the child. The examiner should be at least impersonal, a just person, willing to hear and understand the patient, to see him in an unprejudiced frame of mind. Consciously or unconsciously, a patient is easily repelled or even antagonized by the fact that the examiner is pre-armed with the facts against him. Even reading a letter or report blank in the presence of a case should be avoided, for it is sufficient to make the establishment of *rapport* more difficult.

Perhaps the best test of this ability to handle the child is the examiner's ability to make friends without the use of words. A smile which brings a recognizing smile in return is of untold value as a clinical asset. The reason any smile will not do is a rather mysterious thing, but children recognize a mannerism and differentiate it from an attempt at getting acquainted. Except with quite young children, some simple explanation is quite in order. Mental or intelligence tests are *not* actually ''games,'' and the adolescent sent in for a ''nut'' test before ''court to-morrow,'' or ''school examinations next week'' knows full well he is being bluffed by the ''game'' idea. Far more coöperation and interest may readily be evoked if he sees that doing his best means a favorable report, recommendations in his favor, or the general betterment of his own future in some definite manner.

Healy has said that adults fail to appreciate the vital

facts of childhood. Yet he places little emphasis upon how one is to learn to know this period. Books cannot give any more than an additional mass of data just as incomprehensible as the child frequently seems. To the writer this seems to be due to a general fault of our modern educational methods. We are content to have people know the words about things and this is as sadly true among workers with children as in any other field. The art of words is one recently acquired by the human race, and it means but little unless it carries with it the deeper connotation of being able to sense the thing without words. Knowledge of children must be of this latter sort if it be successful. It is very easy to handle a case and speak of it as a problem case or a complex case or a psychopathic personality or to say that the child's behavior is or is not justly motivated. From the child's standpoint all of this may mean nothing for his future if there is not the actual "set" of the individual into an imitative and understanding frame of mind and body. He who plays with a two-year-old and builds blocks must build them with his whole soul. The velvety texture of their sides, the queer attractiveness of their regularity of form, the color satisfaction, the extreme importance of getting them so placed that they will stay put and the great effort required to accomplish this must form the whole of the world of life for the time being, or one has not understood and so cannot be a successful playmate. The same holds true of the older child. One must throw out adult impressions and build up a mental world and make physical response to it at the child's level, or he does not understand the child. The importance of a hair ribbon to an eight-year-old, the wonderful gemlike beauty of the marble that the seven-year-old took, the taunt of boys in long trousers to the undersized thirteen-year-old cannot be understood by words. Such experiences and attitudes must be lived and responded to in the clinician's own mind,

if he would rightly understand the human need he is studying.

In the same way, it is an insult to a child's intelligence to tell him constantly throughout the examination that he is doing splendidly. It is well to let him know failure in things actually above his level, to let him realize there are things he is not expected to know, and he should be urged to say when he does not know a thing. This ability to recognize his own ignorance is a diagnostic trait of great value. Minor failures should not be stressed. There are undoubtedly cases in which the importance of the examination must be emphasized if the child is to be roused to actually doing his best. In other cases, a sort of inertia needs constant prodding and stimulation. Whatever the needs may be, the case should be met on its own level. Indeed, mental examining is merely that. One question asked gives the examiner an indication of the subject's ability in that direction. A second question asked modifies and readjusts this indication. The third, fourth, and successive questions each add a corrective item to the concept forming. The handling of the child should become proportionately more definite and exact until at last the examiner's mental level should, in imagination, meet that found by the tests. Rote examining with no attempt to make such an evaluation of the subject is of little value. The examiner has, as a result, a mental age, but no real understanding of the individual.

It should be needless to speak of such matters as the necessity for considering the fatigue or travel strain a subject has had immediately preceding an examination, but, unfortunately, such factors seem to be more or less disregarded. It is impossible to enumerate all the chance developments that may grow out of the disregard of this factor. With young children the consideration of fatigue and best testing conditions should begin at the time the

appointment for an examination is made. The question of the child's daily program should be related to the time of appointment. A child whose nap is from eleven to one should naturally be studied either early in the morning or shortly after his nap. Another with a late-afternoon nap may be handled almost any time in the morning. Irregular food before or during the trip to the clinic, early rising to catch a train, unusual surroundings themselves, fear of the clinic because of earlier unpleasant experiences with doctors, must all be carefully sought for and even more carefully evaluated. The clinician whose work is an expression of his actual interest in the subject will not "forget" to watch such factors, for he will envisage the individual he is studying in such a wholesome way that such oversights are impossible.

One constant and perplexing source of difficulty is apt to be the case referred by local clinics or physicians. These often come without appointment, direct from the fatigue of a medico-physical examination. In general, such a case must have at least an initial examination to satisfy those bringing it that the clinic is interested and to insure further coöperation. However, unless the child is a definite or extreme type, it is not only dangerous to diagnose under such conditions, but it is also very unjust to the child. Most adults will readily see the justice of asking for a later period of study before making a diagnosis, and coöperate willingly, in spite of the extra time and effort. But this again depends upon the impression of the earnestness and fairness of the clinician which they gain.

In general, the best rule is to begin an examination with the child in the room alone with the examiner. Some examiners state it as a necessity that there must be no one else in the room. Such a regulation is a good thing, but the examiner must be wise enough to know when the final goal to be achieved is more easily reached by ignoring the

regulation. For instance, almost any parent is more ready to accept the diagnostic statement about his child if he has seen at least a part of the procedure by which the psychoclinician's decision has been reached. Nor is the benefit all one-sided. As the psychoclinician gains experience, he will often find it possible to drop remarks now and then which help prepare the parent for a diagnosis. For instance, as a certain test is passed or failed on, the level for which it is normal may be stated, or, if this is apt to affect the child, it may be noted on a slip of paper and shown in this way. It is especially advisable to explain failures on tests above the child's actual age. The parent may be feeling that the tests are too hard. A simple statement such as "You did pretty well on that for a fifth-grade boy, that is a question we usually ask sixth-grade children," has a favorable effect upon all concerned.

The most economical procedure is to have the clinical historian take the history of the case while the clinician begins the examination. In making this arrangement the parent *and* child should both understand definitely that the parent will be welcome in the examining room after the facts of the case have been given, although it need not be presented in just these words to the child. The parent usually feels more comfortable and coöperates more readily in giving the history and the child feels more at ease in leaving the parent. Sometimes one will find subjects who prefer to be examined alone and then their preferences should always be met.

With young children one best begins an examination by doing anything but examining, if adults be with them. A child under six or seven may usually be handled far more effectively if he is allowed to adapt first to the room, then to test materials in evidence, and finally to the examiner. In such cases it is a wise procedure for the examiner to gather the history of the case himself during this adapting period.

His attention may be gradually directed towards the child, a single test may be ventured, a toy given, and finally the child, with curiosity satisfied concerning his surroundings, will voluntarily turn to the clinician for new objects of amusement and these the tests furnish.

Some parts of the examination should always be given without observers. An older child usually gets *en rapport* more quickly when alone, and most children will give their own story more freely and willingly when no third person is within hearing. This does not complicate matters at all. The clinician must always feel free to request an observer to leave if necessity arises, or if the situation proves unhappy.

There is, however, still more to be said upon the matter of having observers during the examination. Of course, the examining of a child is the focal point about which a clinic is built up, *but* there are other factors that have a tremendous influence upon the value of that examination. Of what use is it to pronounce the judgment of feeble-minded, or normal, or psychopathic upon a child unless the statement of the condition is going to help the child? Such help is a social problem. It means the need for understanding on the part of the family or other guardian. It means the city, county, and state provision of educational methods suited to the condition, and corrective institutions for handling the condition. This necessitates intelligent handling of legislation and all that phrase implies. This necessitates an understanding public.

The education, according to his ability to understand, of each adult personally interested in a child coming to the clinic is a necessary part of the clinic work and a part far too often neglected. *The handling of the parent is far more delicate a task, and as important a problem, as the diagnosis of the case itself.* It involves a practical diagnosis of that person and then his education in relation to the

problem in hand. Such education is slow, but it is fundamental and its effects are far-reaching.

For the sake of the examiner himself, observers are a valuable asset. They are a stimulation to an exactness of methodology which is apt to lapse if self-consciousness is not frequently reinvoked by some such stimulus. A clinic from which parents come away saying, "She didn't give my child a fair chance," "He was afraid of her," or any similarly critical remark, is precarious in its reputation.

One other characteristic must sometimes be evoked by particularly troublesome children, that is, firmness. The child should recognize authority in voice and manner, if the necessity arises. A good illustration of this necessity lies in the handling of hysterical imbeciles. Such a child will frequently wail and cry at the top of his voice, especially if brought to a resident clinic for observation. Sympathy exaggerates the noise. Neglect or seeming indifference has a similar effect. Getting out a simple performance test and ordering work on it will usually stop the spell. The whole seizure is merely *the only way* such a child has known to relieve fear or get what he wants. Negativisms need not be handled this way. Their depth and persistence are usually shown much more clearly by giving one's directions in a fashion contrariwise to what one really wishes done. If the negation is simply contrariness, it may break down at this treatment, or all action may be temporarily checked, or the desired act may be the result.

The successful psychoclinician needs no suggestion as to ways and means of handling these or similar problems. His education gives him the significance of them as behavior problems, his experience enables him to handle them without worry or annoyance, his interest in his professional activities enables him to receive only stimulation and new interest from the problems which confront him, his ideals of service make the possibility of helping a case sufficient

reward for the work and fatigue involved. Whatever happens in the day's routine is not exasperating, worrisome, or a bother, but is transformed into increased information on the individual concerned. Whether a worker has this attitude or can gain it is the final test of his worth.

CHAPTER VI

MEANS AND METHODS

GIVEN a thoroughly trained clinician, the matter of laboratory equipment sinks into a question of relative insignificance. At the demand of necessity a thorough examination can be made with practically no materials save paper and pencil. The ability of the examiner is called upon to compensate for the lack of objective aids. But such a procedure, although expedient in an occasional emergency, is by no means commendable at other times. Naturally, it is better to know what one can find out without equipment than to know nothing. It is not a foregone conclusion that the information gained thus is *just the same* or *just as accurate* as that gained by using standardized procedures with the standardized materials. Indeed, one of the best features about clinical psychology has been the general acceptance of *standardized* tests and test procedures. This has made for a universal comprehension of examination results. All careful workers have been using more or less of the same procedures and so are talking a similar language when they report their findings. The earlier, and even the present-day, psychiatric examinations lack such universality. The personal experience of the psychiatrist has been made the big factor in his ability to handle cases, the means used in studying them have been individual and lacking in organization and standardization.

The other extreme of overemphasis upon tests and test equipment must also be avoided. The inexperienced examiner is especially prone to collect an awe-inspiring group of puzzle boxes, boards, games, and tests for utilization on

all cases. There seems to be a subconsciously motivated attempt to compensate for inferiority in experience by superiority in test equipment. Any clinical laboratory should be constantly working on the problems of tests and their usage, but this must be done in a systematic fashion. New tests should be carefully studied and analyzed as they make their appearance in the current psychological literature. If they test some different angle of intelligence or mentality, they are worth being tried *experimentally*. If they prove of actual value they should then be incorporated into the systematic test procedure carried out on all cases.

Other tests may be very similar to those already in use but differ in ease of giving, ease of scoring, validity of norms, attractiveness, etc. These factors must all be weighed in their relation to the whole problem of the individual clinic's needs before a test is accepted or rejected. The problem is not only one of adding new tests, else would it be simplicity itself to accept all new methods with liberal enthusiasm. The factor of the length of the examination constantly needs consideration. A child cannot stand more than a certain time length of examination without fatigue to the point where more testing is unwise. Two interviews are not always possible. On cases under resident observation this difficulty is in part overcome, but again the length of examinations must be controlled. Our decision on any individual question that arises from this need should be made with a consideration of at least three principles.

1. The knowledge obtained from time spent on a test must be worth that time.

2. The time spent on a child must be proportionate to the demands made upon the clinic and the workers available.

3. The time spent upon an individual child must be in due proportion to his and some other child's need for such study.

Another problem which confronts us the minute we change the tests in use is that of comparability of results. If one is making a six- or ten-year study of the whole group handled in a clinic, the tests used throughout that period must be strictly comparable. Any changing of tests contemplated must have impartial and thorough consideration from this standpoint of the aims of the clinic itself. This handicap in changing tests is also one thing leading frequently to the addition of tests without any corresponding elimination, and, of course, such a procedure soon reaches a limit of practicability.

No discussion of tests to be adopted for general usage can have other than a temporary value in so far as definite suggestion goes. Although certain tests are suggestively mentioned here, there is no reason why others should not replace them as a clinician wills. Any test may be used and be made more or less valuable to diagnostic work. Many tests must be used, if one would be fair to the child. What they shall be is, at present, largely a matter of opinion. But let us remember that not even many tests are a panacea for lack of experience or training on the part of the examiner.

Undoubtedly a clinic of the present day needs as a part of its simplest routine examination one of the Binet revisions. This will give a basis for comparison with the work of other clinics and a means for evaluating other tests. Since this series is so highly dependent upon language and gives a secondary place to actual performance tests, at least a moderate number of the performance tests which have been thoroughly standardized should be added to the minimal examination required on each and every patient. So far, the development of such performance tests has been somewhat disappointing. The standardized Seguin form board is definitely adapted to clinical work. The blocks appeal to the child, their size suits his need,

and the relative size of the different blocks makes a false placing impossible. The length of time required for the test is brief, the standardization is fairly good. The test itself reveals especially learning, training ability, form recognition, and motor control. Most of our other performance tests are so complicated they are hard to analyze into information clinically useful. The Knox tapping test is an exception, for it tests primarily an imitative, place memory which comes as near being a simple process as our tests reveal. The Goddard adaptation board tests this same place memory, throwing in a constantly increasing need for adaptability, or, as it can be more clearly stated, it adds a factor of change in position to the known situation. The Porteus maze tests are another encouraging addition to this group of tests involving actual activity. One need not, however, evaluate them as highly and as all sufficiently as their inventor does. We need more tests, concrete, interesting, brief, generally applicable, for the study of the learning process itself, of adaptability, inhibition, modified using, generalization, etc.

Of course, educational tests should have a definite place in the clinical examination. They are necessary if we wish to insure justice for the child as well as for teachers. Any one with even a few months of clinical experience realizes that there is no definite relation between the grade a child has attained in school and his actual acquisition of educational information. Promotion every two years regardless of success is frequently the rule for handling dull children. Other schools promote because the child's size no longer fits the desk in the lower rooms. On the other hand, careless, inattentive children who "cannot concentrate" may prove to be far above the teacher's estimate. Only the use of an actual examination on school subjects will show up such discrepancies between report and condition. The choice of such tests is difficult and any series used should

always be interpreted in the light of the school system from which the child comes. Until school surveys which grade schools themselves become a matter of course, there must naturally be a good bit of leniency in this interpretation. Every large school system has good and bad schools where grade requirements differ in enforcement. So far as possible, these local conditions must be woven into the final interpretation of the school tests.

Another angle of the child's development is still left unexplored when these three lines of examination have been completed. A Binet series shows how his intelligence compares with that of other children tested on situations which are identical for all of them, since they involve more generalized experiences. Performance tests show intelligence attacking concrete visual situations by actual activity. Educational tests show what a child's intelligence has acquired from an environment where he is offered the same opportunity as other children. There remains the information which a child has the opportunity to acquire because of his own unique individual experiences. This differs tremendously for even two children in the same family. The general information or general orientation of a child is tested by seeing what he has assimilated from the experiences he has had. Naturally, we are dependent upon questioning for our knowledge of the environment, but more of this later.

Morphological tests such as the series used by Smedley, The Training School, etc., are to be considered rather seriously. Tests of grip, lung capacity, and ergographic ability are not physical tests. They test the mental ability to control the organism in the working demands made upon it. As such they are highly diagnostic.

Any laboratory endeavoring to do diagnostic work should have at least the equipment required for such tests as have been enumerated. This is but little when all is

considered. A very definite equipment must, of course, be added for the special types of cases. A scale for testing the blind, one for use with the deaf, an infant scale, aussage equipment for cases needing it, additional tests for motor control, series for the study of association, aphasia, and play should surely be available.

The examining rooms should be definitely lacking in all fearsome or suspicious qualities. The more informally they can be arranged, the better. Too attractive pictures, books, desk ornaments, or even files must be avoided. All material is best kept on shelves fitted with opaque glass doors or slides. The objects in them can then be used at will, and distraction is avoided unless one *wishes* to introduce it. Some attractive toys should be considered a necessary part of the equipment. Of course, one immediately meets the question of handling the child who wants to "take home" all he sees. There is never any difficulty with such an issue if a few rubber balloons be kept on hand. Almost any child will exchange another toy for a balloon "to keep." The examining room should be quiet, light, and there should be comfortable chairs for the children. Everything used should be of such a nature that it can be easily sterilized or replaced. There should always be on hand crackers and cookies, and it is well for the examiner to know, before an emergency occurs, where milk can be obtained.

Blanks? The blanks used in recording test findings are probably as important as any other part of a laboratory's equipment. They should facilitate the recording of all work done in examining a child. They should never become so elaborate that usage of them distracts from observation of the case itself. Nor should they be so inflexible that there is no possibility of recording the unusual reaction with ease.

There should be definite uniformity in the handling

and filing of case records once the work on a case is completed. The blanks should always be arranged in the same order in a case folder and this should be such an order as is most logical and as best promotes ease of consulting it later.

Of course, the handling of case records necessitates filing systems, index files, and similar record forms. They should enable a worker to find out in not more than two minutes whether or not a case has been examined and is on record. A numerical system of case filing seems preferable. Of course, it can be used only in connection with a card index of names alphabetically arranged and indicating the case number. This makes a slight increase in the time needed to find a case record, but the other advantages of the system overweight this. A numerical system is, of course, also chronological. Hence, any one group of cases is filed together. The work of any one quarter, year, or of a longer period may be reviewed without disturbance of other records. There is less chance of error and greater ease of corrective checking for errors in filing. The out-of-date, and hence, seldom used, cases may be filed in a less easily accessible place, and the active file is constantly kept down to a size that renders it easy to handle.

Every transaction on any case should be recorded accurately and in detail. Telephone calls, telegrams, visits from relatives or friends, interviews, observations while in the group, all types of history, should be definitely made a part of the case record. Perhaps the easiest way to do this is to have in the entrance office, near the telephone centrals, a good-sized composition book in which any telephone call, appointment, telegram, or visit is immediately entered, entries being dated each day by a clerk, and each single entry being signed as made. These can then be transferred in routine fashion to case records, attention of the patient's officer being called to entry when it was not originally

made by him. Once transferred, it can be crossed out of the day book, thus leaving only a few pages of "active" memoranda at any one time. A worker, coming on duty, may at once acquaint himself with new developments relating to his work. A habit of such recording once acquired eliminates all such confusing incidents as appointments forgotten, children arriving unexpectedly, and the thousand and one vexations due to lack of system.

Given equipment, test-record blanks, a pleasant and comfortable examining room, what more need we consider in our brief reviewing of the clinic laboratory's attributes? The question of the examination itself confronts us. How to examine, and the why of that how, are the most important features in establishing the clinic's reputation. Even if we assume that the clinic has determined upon the usage of certain tests and series, there remains the whole problem of clinical skill and methodology. When a mental examination of a child means the giving of some one test or test series, this question of methodology is not a serious one. The Stanford or Kuhlmann or Goddard-Binet may be given fairly well by just following the directions in the manuals. Extremes of fatigue, the relation of this test series to others, and the preference in time to be given one or the other are not marked questions. Suppose, however, that one is not working to obtain a mere mental-age rating but intends to examine the case as rapidly as it can be done with thoroughness, and to study all aspects of the child's intelligence. It is not possible to run such an examination into an indefinite number of hours. Neither is it highly logical to carry the test through several days, for we have no way of knowing that the child is at all comparable in his ability on successive days. This is even more apt to be true on abnormal cases than on normal children. Consequently, the problem is a rather complicated one, and even any suggested plan for handling a series of test pro-

cedures should always be modified according to the individual child's needs.

It is well to begin the examining with some such ordinary matters as writing the name, address, school grade, school attended, the date, and other facts which seem so ordinary that nervousness or tension disappears. The demand for things such as those a teacher might ask is usually reassuring to the child. Even if he has been made nervous or tense by overhearing indiscreet conversations about the examination, this soon subsides. The absence of all that is fearful and threatening in the environment and the daily familiarity with the questions asked restore his confidence. Sometimes, however, one finds a case so full of grievance or antagonism or complaint that the only just thing to do is to encourage the confidence of the case. The tale may rush out or be drawn out only with difficulty, but it must be eliminated before a satisfactory examination can be attempted. Of course, such cases are comparatively rare, but it is all the more essential that one be constantly on the alert for their appearance.

Because of its universality of application, some one of the standardizations of the Binet test should usually be given early in the examination program. The writer does not advocate the generally accepted method of giving these tests. Beginning with a year group of tests at or below a child's level and working up to the year in which he fails is bad methodology and very poor from a psychological standpoint. "Random" testing is also advocated by Terman and others as the only means of finding out where a child stands and the proper point from which to continue systematic work. The writer does not believe that Binet or Simon ever intended their tests to be used in such fashion. To begin with, their first scale was not an age gradation of tests. All of the sentences for repetition were grouped together, the comprehension tests were all in a

group, the digits for repetition and all other tests were similarly handled. Those of us who had used this arrangement did not see in the age-group revision other than the same tests newly placed so that their very placing showed their normal value. It was not as hard, consequently, to go ahead and give all similar tests under one set of directions as it would have been to work through the year grading of tests, hitting the same test series again and again at higher levels and *repeating the directions each time.* The serial method of testing is the logical one. It saves time; it orients the examiner very quickly to both extremes of his subject's intelligence; it saves fatigue and renders possible a great saving of both the examiner's and the subject's energy and nerve strain. A brief study of the test series will illustrate this:

Let us take, for instance, repeating digits forwards. If one is working serially, he gives the direction, or *aufgabe,* as we prefer to call it, in detail and starts with 2 digits. In most instances they are given correctly upon the first reproduction. The clinician knows then that the directions were understood. He goes on and gives 3, 4, 5, 6, 7 and 8 digits, expanding to two or three trials, as required when he reaches the patient's point of beginning failure. What has happened? He has begun systematically, not at random, and knows his test was understood and that failure is the result of actual inability. Moreover, the probabilities are that he has saved at least 2 or 3 wearying repetitions of the aufgabe, the child has had a longer period of associative thinking without need for constant readjustment to a new test, and *we already know the upper limit of ability on this one series of tests.* Diagnosis is begun, and formulates itself gradually throughout the rest of the examination.

The test grouping was the basis of the Point Scale revision of the Binet, but the gain through having the tests all grouped by series was more than offset by the loss of

the mental-age placing of each test. Serial testing throws a little more work upon the examiner, but it adds the Point Scale efficacy to the age-scale value. Each series as finished gives us a *mental age* on that group of processes. In fifteen minutes by such examining one knows practically the type-differentiation of his case. All of the widely varying series are best given at the beginning of the examination. The tests group themselves easily into some definite series and others, which, though closely related, may be easily modified. Some groupings are obvious. The digits forwards form one series. The digits backwards is not in any way a part of the same series. It tests adaptive usage of the first ability and is preferably given later in the examination, for ability to repeat digits backwards undoubtedly depends upon the memory span for digits forwards and the extent to which failure on the reversion should be expected may be partially gauged by the limit of success for the repetition forwards. In most instances one should surely not chance fatigue from too prolonged work of this character by giving these as consecutive series. Name, sex, age, parts of body, and knowledge of right and left fit together well as an opening series for younger children, whereas with those more advanced, the date, months of the year, days of the week, make an equally successful opening.

The following series are suggested because of the known ease with which the aufgabe or direction for one test drifts into the next:

Repetition of sentences from the 3-year group up.

All comprehension questions, beginning farther down than seems necessary.

Eight-year similarities, 12-year similarities, 7-year-level differences. (The natural tendency of the child failing at the 8-year level is to answer by difference when similarities are requested. This tendency cannot be differentiated from an automatic perseveration of what has been a successful type of answer to the 7-year-level questions, if these are given first, and the

resultant failure is consequently just that much harder to interpret and is not quite so fair to the child.)

The definitions in 5 and 8, abstract definitions in 12 and differences between abstract terms in 16, may be related easily.

Square, diamond, ball and field, design, paper-cutting, and then induction.

Clock problems, then code, for both involve a very special imaginal factor.

Construction of sentences in ninth and twelfth years.

Counting 4, and on to 13 (for some examiners fail to realize that success on 13 covers success on the first four), number of fingers, counting backward, naming coins, making change, are logically related for lower levels, whereas making change, when the basal year is low, may well be used to introduce the 14-year-level arithmetic problems.

The æsthetic comparisons, missing parts, and pictures in 3, 7, and 12 are coherent.

The vocabulary test is best given all at one time. If it be left until fairly late in the examination, even an inexperienced examiner will find giving it eased and facilitated by starting at the words which indicate the probable level of the child on the whole test series. If a child is testing about 10 years in level, it is easier to begin with the thirtieth word, search for his upper level of ability in the definitions and then relieve his mind by working backward from the twenty-ninth word. This gives the harder part of the test first and more nearly balances the difficulty of the task with fatigue on the task.

Enough fables should be given at one and the same time to ascertain both the 12- and 16-year-level scores.

These groupings may be varied considerably, and are by no means exhaustive. Each beginning examiner should be put through a definite drill of working up series that slide easily from one test to another similar task with minimal effort. Of course, all series are not needed on each case for a child of high intelligence level may not need to be tried on the lower, easier series. By the time the upper limit has been found on six or seven series, the examiner may well go ahead *without guessing* and "fill in" the tests needed to complete various years. The proper place to

begin such filling in is the upper end of the scale and this should surely be a year *at least* above the highest serial success, higher if successes are scored therein. Then, gradually, the examiner should work back, reaching *at last* a basal year.

Actually, the difference in such examining is of considerable value to the examiner. If he is testing 300 days out of the year and sees two or three children a day, the serial method of giving digits will save him an average of 2,000 out of 3,000 probable repetitions of that one series of directions. Perhaps this means but little to the reader, but it is the need for monotonous accuracy in the repetition of such directions which does more to wear out the nerve reserve of the examiner than all the problems of diagnosis put together. We have so far paid but little attention to the question of the mental hygiene of the examiner himself, yet this is undoubtedly an issue which we will have to face. The writer knows of no other professional demand which makes as exacting and constant a drain as that produced through repetition of the same carefully monotonous test conditions. With serial testing, once the series is over, the examiner knows he will not have to repeat the same phrases again in the next ten or fifteen minutes. Moreover, he has longer periods between giving detailed directions.

There is one superficial criticism of serial testing from the standpoint of the inexperienced examiner. It takes a great deal of time to learn the exact place in the whole test grouping at which the next member of a series appears. This is undoubtedly true, and in reality it is the greatest argument for serial testing. It necessitates an absolute knowledge of the scale and a finer, more discriminating, knowledge of the relation of tests to each other than can otherwise be obtained.

From the standpoint of the child, there is undoubtedly much less fatigue. If the usual procedure is followed, and

each test at any one age is given as a discrete test, the child is constantly attempting to adapt to a new situation and, the more rapid his adaptation, the more quickly is another demand made upon him. With the test series, adaptation is far more gradual and complete change of the aufgabe occurs probably once in 3 or 4 minutes instead of once every 30 or 40 seconds. One can make the test far more what Binet asked of it, that is, a game. The transition from test to test comes gradually. It is very natural to ask a child for the date after having had him write his name at the beginning of the test and then following that come very readily the months of the year and the days of the week. If the case is not a school problem and therefore not at odds with the school system, it is very easy to go ahead with another group of academic tests and to ask the making of change, counting backwards, counting 13, the naming of coins and, in the case of a psychopath where there is a long range of testing necessary, to say incidentally that we *have* to ask these easy things and go ahead with the problems in the 14-year level.

Psychologically speaking, the serial method of testing renders the findings on any one test series available as a part of the immediate diagnosis the minute that series is finished. Each successful series adds to and modifies the diagnosis so far formulated. In a few months this cannot but help reflect upon one's own knowledge of the tests used and make far more valuable to the examiner himself the actual testing experience which he has had. Let us illustrate: Suppose we are about to examine Margaret, a 14-year-old girl, in first-year high school, who does not seem to get along in school and who has been brought to us as a problem on that account. After a few introductory remarks, we give her the series—date, month, days of the week. She passes the series so far as the test requirements go but errs two days on the date of the month so that we

already have an indication of inaccuracy of knowledge at a 9-year level. We next give her the arithmetic series and find that she does the 14-year-level arithmetic problems with some confusion of reasoning but correctly within the time limitations and so passes at the 14-year level. This makes her normal in this series. Before giving her the induction test, we lead up to it naturally by giving the drawing series, and here we find marked evidences of motor disturbance. The girl has sufficient memory to gain credit for the design at the 10-year level, but qualitatively her performance is very poor; the corners meet in a straggly fashion, and the lines are irregular. Her performance on the ball and field is likewise peculiar, showing the same incoördination. She does the cut design in the eighteenth year without any apparent difficulty of reasoning or imaginal functioning, although, once more, there is marked negligence of performance. Following this with the induction test, we find she has no difficulty in abstract working out of the rule so that from another line we corroborate the fact that her reasoning is up to the 14-year level. Her work on the code fails because of a number of small errors. We finish the series on imaginal ability by giving the clock problems and corroborate our former findings of good ability in this respect by success on that test. We next give the repetition of digits and find that she cannot say more than 5 digits forwards and she is therefore at least below the 10-year level on immediate rote memory. The repetition of sentences in series is given next, and here again she fails on the 10-year-level tests. The repetition of digits backwards is given next, and here she fails on the 9-year tests for 4 digits. Each additional series gives us a final judgment of the girl's ability in some one type of performance. Each additional series modifies our concept of the girl as we have formed it tentatively on earlier performance. Our final concept of her as a psychopath or a non-psychopath, a nor-

mal, an inferior, a precocious, or a feeble-minded girl will depend upon the relation of these partial concepts to each other. To one who works with serial testing it seems impossible to obtain the same knowledge of a child in any other way save by a prolonged and arduous reëxamination of the test series after the whole test has been given in other fashion. Even then one is apt to find that outstanding abilities or disabilities have not been checked to the limit of the tests because one did not see any reason for giving the girl a test two or three years above the level at which she has failed on everything else. From the standpoint of personal experience, the writer is positive that the serial method of testing is a fundamental prerequisite of technique when one wishes to study test findings qualitatively.

The reversal of the usual procedure of getting a basal year first is necessary if one wishes to balance fatigue and the difficulty of tests given. The tests required for a basal year are so much easier for a patient than those at the upper end of his range that they are still easy for him as he gradually grows more tired. Moreover, if the harder tests are given earlier in the series, and gradually those are reached that are easier, the subject will gain confidence in himself and finish the examination in a happier attitude. Earlier failures are forgotten in later successes, and he is far more ready to go on with other series of tests. Of course, successes must alleviate failures even in the earlier part of the examination. The basal year should not be a single year of successes. Serial testing has shown the extreme irregularity of many cases which sometimes run as many as three different basal years with the years in between showing failures. At least two successive years should be covered to establish a double basal. Of course, serial testing is almost impossible where one is using a record blank which is booklet in form. One cannot easily

turn a number of pages back and forth for scoring. A simpler, briefer blank is necessary, one that enables the examiner to see the successes and failures of the whole examination at a glance. It not only renders test recording easy, but enables one to see the whole test series in their relation to each other. One cannot use a manifold page record in any such simple eye-inspection fashion. The eye impression of one page fades as another is studied and the details presented are too numerous to amalgamate for one mechanically.

Individual tests also gain significance through serial usage. Even though we are not consciously aware of it, the first tests a child does for us make the deepest impression. What he does later may be said to be an explanation of the possible mental ability of a child who has responded as this child has to our first tests. Such tests are really strengthening their norms in this way and indicating exceptions at the same time. This is one reason why it is well to vary the order in which tests are presented. An examiner who always gives certain tests first, others next, is bidding fair to develop a nauseous distaste for the whole matter of mental tests. But aside from this reason from the examiner's viewpoint, there is every reason for variability of initial approach from the patient's angle of the matter. The conversational method demands this. If a child is interested in books, let him do the reading test or look at pictures. If he wants to play with other blocks, get out the weighted blocks. If the pencils and paper interest him, begin on the drawing series. This is not psychological finesse, but mere common sense, and will have its immediate bearing upon gaining coöperation successfully.

After the mental age is ascertained, the most radical change possible in the examination should be made. Practically all of the tests on the Stanford are verbal. The oc-

cupations involved are refined in size and, with the exception of the carrying out of the three commands, there is no test which takes the child out of his chair. The performance tests may be used next for they create a real diversion of interest. The Seguin form board should be given with the child standing, for only thus can he have ease of muscle play sufficient to place all the blocks with maximal speed. The other performance tests may be done standing, kneeling, or sitting; let it be a matter of the child's own decision. Of course, many older children and surely those of higher intelligence level and normal functioning will feel no great fatigue and will go on quietly and with interest through a long examination. If any of the tests of actual control, such as the grip and lung capacity, are to be used, these may well make a break before the rest of the examination is carried out. Then one may go ahead with things which are less actual strain because they are the more familiar tasks, that is, tests of school ability.

Unfortunately, most of our standardized tests to date do not directly test the child's ability in its relation to the school work of his grade unless they are so long that their usage is impossible without absorbing long periods of time which are not always available. We need simple tests for each school year which are as definitely standardized as counting 13 at 7 years of age, copying "The little Paul" at seven years, writing "The pretty little girls" from dictation at eight. Ayres' standardization of spelling gives us a very good group of minimal grade requirements in that subject. By using his lists of those words spelled by 100 per cent of the children in each grade, we know that a child is below the minimal level of a grade when he misses even one word of such a list. Most arithmetic tests are too difficult for the usual clinic case. They do not cover the work of the lower grades, nor the reasoning side of such

lower-grade problems. In reading, it is easier to pick a test that is nearer what one wishes. Throughout this part of the examination the aim should again be to see by serial usage of tests of varying grades of difficulty just what the child knows.

Association tests, especially the word-association series such as the Kent-Rosanoff,[1] or the modified Woodrow-Lowell[2] list, are difficult to give. One must so place such a test in the course of his examination that it subserves the chief aim for its being given. The association test reveals complexes, fears, experiences. It shows up delayed reactions, fatigue, automatisms, and many other traits. The question is this: Shall the test be given near the beginning of the whole examination so that the child may do as well as possible upon it, or shall it be given towards the close of the whole examination so that the clinician may have, through it, a picture of abnormal tendencies maximalized by fatigue? The very factors which tend to prevent one's getting a fair estimation of a child's ability in other tests help one obtain more of an insight into his abilities and his disabilities on this test. The association series are not "intelligence tests" in the accepted sense of the word. The intelligence test must give the individual every chance to show the height of his power and ability. The association test is a detailed study of the contents of one type of mental process. The literature on this subject is rather bewildering because it discusses both the intelligence level factor and the quality of the test findings in indiscriminate commingling. The question of similarity between the answers of adults and the answers of children is a serious one. Rosanoff found that after the age of eleven there was little difference in the general body of responses of

[1] Grace Helen Kent and A. J. Rosanoff, "A Study of Association in Insanity," *American Journal of Insanity*, 1910, Nos. 1 and 2.

[2] Herbert Woodrow and Francis Lowell, *Children's Association Frequency Tables*, Psychological Monographs, 1916, No. 5.

children and adults, whereas the younger children gave an increased number of individual associations when checked on the adult norms.[3] Römer finds eight is the lowest age limit at which children give predominantly a common type of reactions.[4] It is also the upper limit at which normal children respond by phrases. Durea has analyzed some of the reaction frequencies in association for children of the 9-, 10-, and 11-year levels, but in none of these groups does he find a correlation with Stanford mental age, performance ability, or literacy that is high enough to be of any general significance.[5] The difficulty with all of these studies is that they are anxious to bend every test symptom to a mental-age evaluation. The association test is a test of mental function regardless of the child's level and it should be used as such.

The aufgabe on this test is quite difficult to give with fairness to the child. The writer, two years ago, had the following experience in teaching new examiners. A child was examined upon the day of his admission by the writer herself. The association test seemed to indicate a fair degree of intelligence, individuality, and some very definite instability. A day later the test was repeated by a student. To the writer's surprise 97 out of the 100 reactions were automatic nonsense syllables and sound associations with the stimulus words. Believing it to be a matter of indifferent and unsuccessful aufgabe, the child was brought in and a new worker of very different type, not knowing what had happened, was asked to give the association series over. A series of answers approximating the writer's re-

[3] Frederic C. Eastman and A. J. Rosanoff, "Association in Feeble-Minded and Delinquent Children," *American Journal of Insanity*, July, 1912, pp. 125-141.

[4] Fritz Römer, "Associationsversuche an geistig zurüchgebliebenen Kindern," *Fortschritte der Psychologie und ihren Anwendungen*, 1914, Vol. 3, pp. 43-101.

[5] Mervin A. Durea, "Individual Variability in Test Performance," *Journal of Delinquency*, March, 1922, pp. 86-98.

sulted. Again the poorer examiner was given a trial at him with results comparable to her first series. Then she was reinstructed and obtained a series fairly like those of the other examiners. Of course, the child was unusual in type. If normal in adaptive learning, he would have carried over the proper set from the first examination, but he was a slow learner and highly suggestible. The experience is sufficiently enlightening. It needs no further discussion. Association tests should not be written. Even adults experience great difficulty in keeping to a first reaction when writing their reaction. One should not expect it of a child. Intonation, delays, misinterpretations, repetitions, giggles, blushes, and all extraneous comments should be noted. They are at least as important as the reaction word.

An association test may well be given a number of times if the child is kept under observation for more than 24 hours. It is naturally permissible when later reëxaminations are given.

Tests on general information and orientation may be used conveniently at various intervals in the examination. Some of them may be used as an introductory conversation instead of just wasting time on purposeless remarks. But such information is far more likely to be given with freedom towards the close of an interview. Moreover, one can work very readily from such questions about home, play, work, and hobbies to the reason for the child's trip to the clinic. This usually brings the child's own story in detail, and usually there is more or less emotional disturbance as the telling progresses. Such emotion interferes very definitely with any further testing upon lines where performances are standardized. It should consequently come, by choice, at the end of the interview. The child's story should be recorded as nearly as possible in the form in which he gives it. Miscellaneous tests of other sorts may be worked in at different points. The whole problem is one of alter-

nating tests of various types so that the child's interest is held and fatigue is thus temporarily minimized.

When a child is under prolonged observation, the questions of fatigue and sustaining interest are less serious. Certain tests may well be done on different days. Unstable children are very frequently as different on two days as though they were two different children, but the possibility of this must be considered. If tests are divided between two days, at least one of the tests should be given both days for comparability. Any one series should surely be given in its entirety at one sitting. With unstable or erratic children, it frequently happens that their ability on certain tests varies tremendously from one examination to another just a day or two later. The *mental age* obtained may be exactly the same but the tests on which that mental age was obtained the second time may be the very opposite from those which gave credit the first time. Partial alternation is by no means rare. It frequently happens with unstable children that the repetition of a series such as the Stanford will bring, with the most comparable of efficient testing methods, variations of even a year or two in mental age, although the tests are but a day or two apart. This is quite unexpected from the standpoint of work reported on average children.

No examination should be considered complete unless the examiner has recorded the attitude and behavior of the subject during the examination. Gestures, motions, postures, mannerisms, attitude, emotional condition, moods, changes, should be carefully recorded at the time of the examination. Seemingly irrelevant remarks may be full of diagnostic value, simply because they *are* irrelevant. Lack of inhibition, over-affectionate advances, irresponsibility, disobedience, tantrums, are as valuable as any other form of data.

Throughout the whole procedure certain fundamental

virtues of such work should be kept in mind. Truthful, that is, accurate recording, simplicity of statement—for of all verbosity, scientific verbosity is the worst—definite delimiting of what is meant, conservatism, with radicalism of thought limited to one's own personally recorded prognosis. These are fundamental prerequisites for work which is to be of concrete value.

CHAPTER VII

VERIFICATION OF RESULTS

"Obvious need," exclaims the scientist, and yet, peculiar as it may seem, the whole tendency of psychological diagnosis has been to formulate and deliver diagnoses without checking the results. True, the month and the year values on the Stanford may be carefully checked, the I.Q.'s proven, the values of all other tests be carefully established by comparison with norms, but this has practically nothing to do with "checking" the diagnosis. Such bits of work merely check the accuracy of the work done. The checking of the diagnosis is another matter. The test results plus the examiner's experience lead to a definite formulation or concept of the patient's condition. This concept is a psychological diagnosis which may be very definite or indefinite. Even in its most definite form it is not the sort of thing which should be passed out with finality as the last word upon the individual's condition. A psychological diagnosis is the scientific basis of a clinical diagnosis of the individual's mental condition and ability, but it should be checked by every possible auxiliary type of information that can be obtained about him.

A careful neuro-medical examination must undoubtedly be demanded. The presence of physical handicaps, whether organic, structural, or functional, and the possibility of correction and of having, as a result, a better human organism to train or educate are of most vital importance. Such an examination can err only in incompleteness, although it is highly essential that the work be carried out with a perspective that sees relativity of importance and

can unbiasedly help determine the relation, or lack of relation, of eye defect to school failure, adenoids to truancy, syphilis to immorality, or whatever else presents to its behavior accompaniment.

The history of the individual from the time he is born, his development, opportunities, and handicaps must all be taken into account if we would be fair to him and to ourselves. Then, too, even these facts must be related to his inheritance, the environment in which he has had to grow up, the schooling he has had, the way he has behaved, in school, at home, at play, at work. The use he has made of his opportunities is the biggest aid to reaching a final diagnosis. If all of these findings can be logically fitted into the concept of the individual as we formed it from direct observation, then the tentative psychological diagnosis becomes the clinical statement of him. If, however, facts found in the history prove to be extenuating in their bearing upon the situation, the original diagnosis must be modified accordingly. Very often it is only data so obtained which will specialize a very general notion of the individual into a specific line of investigation, and, sometimes, more work must be done to amalgamate the findings from such diverse fields. It does not do to make a diagnosis that merely balances evidence against evidence and swings in favor of the greater amount. The various discrepancies must be analyzed until they fit together into a concept that explains them before one can be at all sure that the diagnosis is correct.

To enumerate in detail the facts which should be embodied into the history of an individual would be almost impossible. Any fact one obtains about a person helps one to understand him better. The limitation of what one can get is usually the limitation of what is acceptable.

Concerning the individual himself every detail relating to pregnancy, birth, infancy, feeding, dentition, develop-

ment of walking, talking, and playing, is important, either negatively or positively. The detailed history of the illnesses the child has had, not merely reported by name, but with a descriptive report of the child's actual condition is most valuable. This will not be gotten spontaneously. Very often it takes a lot of gentle questioning before a mother or father remembers significant details. For instance, it does not do to reason that if the parent says there have been no convulsions at any time that this is actually so. The person giving the history may have answered truthfully according to his understanding of the situation, but if there is reason to suspect any disturbance of this sort, it is often necessary to ask not only for convulsions, but also for "spells," fainting spells, fits, "heart spells," falling spells, seizures, etc. Recently the history of actual convulsions was given the writer only when detailed questioning of the parent led to a statement that the child had had the "shakes," which then resolved itself into a voluble description of petit mal epilepsy, the presence of which had seemed inevitable from the study of the child's actual condition.

The whole of the child's school experiences should be gone over in detail with regard for extenuating as well as convincing circumstances. The age at school entrance, the type of school, the physical condition of the child at that time, harrowing experiences, severe punishments, poor teaching, removal from one educational system to another, quarantine absences, likes and dislikes in relation to school should all be investigated just as carefully as grade repetition, truancy, and failure. The child's own report of likes and dislikes in regard to school subjects, school teachers, and schools should be checked as fully as possible.

The social life of the child, his behavior in relation to other members of the family, his obedience, disobedience, solitariness, affectionate manner, noise, quiet, games, plays,

interests, home duties, playmates, playgrounds, leadership when with other children, behavior with others should all be analyzed. If the subject has reached the teens, these questions take on a very special character, for the modification of all earlier behavior by sex consciousness is introduced. Economic value of the individual also becomes more important. The child of three who can dress himself is gaining an economic value to the family group. Playing alone, that is, without constant parental supervision, ability to run errands, to do little household chores, all add to this aspect of his status. The question of actual money earning bears a totally false relationship to such value, especially in homes of the better middle-class, where it is considered rather lowering to have the children working for a few dollars a week but where this denial is more than balanced by the regular training into responsibilities at home.

When an individual has once gotten to the point of trying to support himself, the details of the positions he has had, the wages earned, the length of time such positions have been held and the reasons given for leaving are diagnostic in the extreme. It is no unusual thing for a feeble-minded boy to give up a job and rest supinely at home on the efforts of a worn-out mother because it is too hot to work in summer, or he gets too dirty on that particular job. His changes from one position to another are merely meanderings of chance. There is no definite motivation such as shorter hours and the same pay, more chance for advancement, or better wages.

The place of religion in the everyday life and the amount of religious training should be ascertained in each case. Delinquencies, and social problems which make trouble for the home, or the school, or the group with whom he comes in contact, should be investigated in detail. Usually a careful searching back along the road of how the individ-

ual came to be examined at this time leads to this. Worries, home crises, self-denials to overcome peculiarities, all of the pathetic strategies of striving to bring a child up in the way he should go will be innocently revealed to him who knows how to read.

Having obtained a fairly complete picture of the child, the next thing to do is to refocus this in the light of what can be learned about the family. It is not enough to ascertain the intellectual and physical status of the father and mother and the other children in the family, the siblings as we usually speak of them. There is every possibility that it may be years before inherent traits in any or all of these develop to the point where they will fit into the picture as a part of the conditioning of the patient's disabilities. The farther our gathering of facts extends, the more probable is it that we would get the evidences of wrong predispositions were they present. The difficulty of obtaining such data varies. In one instance a young adolescent, seemingly intelligent enough, one of a gang of successful young thieves, was sent to the writer as a problem serious of solution. A first interview with the mother gave the frank statement of three generations of insanity, involving all four grandparents. The father seemed normal save that he was despondent at times. One of his, the father's, sibs has an "awful temper," another is deaf and in very poor health and suffers from chronic headaches, the other is healthy and well. The father of this group, that is, the paternal grandfather of the boy studied, was insane and died at seventy of softening of the brain. His wife has insane spells of temper and comes from a family in which the females have fiery tempers and the only male sib was a wanderer, gone on one trip for thirty years. Beside our patient's family, the only other known descendant from this family is a girl who is a paranoid dementia praecox under institutional care. The mother of our boy

is intelligent but highly neurasthenic and excitable. One of her two sibs is highly despondent at times. Neither has children. Her mother suffered from a paralytic stroke, *her* own mother having had three strokes. This maternal grandmother married twice. The grandfather of our boy was insane and epileptic and wandered off at times. Of his sibs, one died in the State Hospital for the Insane and another has a daughter there now. The others died too long ago for reliable information to be available. That inheritance of disturbances is not only from this maternal grandfather's side is given us by studying the children of the grandmother's second marriage. She had four children by this marriage. The first was normal, the second died at birth, deformed, the third died young of diphtheria, and the fourth was a girl, immoral and absolutely "no good" who deserted her two children, of whom the oldest is definitely feeble-minded and the other still too young to be definitely diagnosed.

The sibs of our subject reveal a rather interesting patchwork reproduction of these various traits of their progenitors. The oldest two are normal girls, twins, who are highly intelligent and very nervous, tense individuals. The next is a sister who suffered from convulsions from the age of three to seven years and who seems to be all right now. The next is a man who had convulsions as a baby, and who, as he got older, was a definite problem because of his continual running away and who, interestingly enough, has found an occupation wherein he legitimately wanders from place to place. The next son had convulsions of a grand-mal nature from the age of one to eighteen and is away from home working most of the time. The next is a girl who shows no signs of abnormality as yet. The next in order was a miscarriage, and then came our subject who began running away at the age of three, never returning until found. By ten he began stealing and has a record of

four years of such behavior interrupted only by periods of attempted reformation in the industrial school. With such a definite hereditary predisposition to a disturbed nervous system one views the delinquencies of the subject from a viewpoint differing greatly from that of the officer of the law who sees in him nothing but a chronic offender, a thorn in the side of the law. Nor does intelligence testing indicate that we are wrong to assume this attitude towards him. He tests sufficiently high to have enough intelligence to not do the things he does. The Stanford rates him at twelve years and five months mentally.

His home environment and social opportunities have been such as to give him no excuse for anti-social behavior. The minor indications found in our examining are significant, but not significant enough to enable us to predict what is apt to happen until one views them in relation to his heredity. He is lacking in any definite emotional response to the situations in which his arrest lands him. A perpetual grin disfigures his really attractive face. He gives one the impression of having delusions of the most pleasant type, yet none can be elicited. His reaction times are irregular, his test findings indicate extreme irregularity, poor comprehension, and reasoning inferiority much below where he actually scores. He admits masturbation and intercourse since the age of twelve.

In this case the history is the decisive item which justifies the care for the boy which his psychopathic indications would suggest . . . that is, therapeutic, or sanitarium, care for his mental condition rather than punishment for that which he evidently cannot control. This is more evident when one recalls that he has experienced two incarcerations for attempted reform with less than two months of good behavior after each interval, although he was "corrected" for eight months the first time and ten months the second.

It is not, however, as easy to gather such data as this

might lead one to infer. The usual case history gives facts which are less spectacular, and it offers fewer of them. Often, indeed, it takes two or three interviews to get significant material, for there must be established a definite confidence in the individual to whom family secrets are being told, and the better the family, the harder it is to get a statement of that which threatens their family reputation, integrity, or honor. Sometimes, indeed frequently, when one is working with problems of delinquency and dependency, it is impossible to obtain any definite family history. In a way this is perhaps the worst type of family history. The family is a social unit of many generations of social standing and acceptance. It is bound together by ties which are recognized everywhere. The obligation to the family is the elemental social obligation. In most normal families, even though there is little of financial resource and little chance of a better condition in the near future, blood ties mean obligation. Consequently, we are all familiar with the poor family who make the effort to help the even poorer relative when the need comes. We all know the disgrace with which the average working man's family views the poorhouse, charitable agencies, and free dispensaries. The honor of the family name and the reputation of the family as self-supporting and independent motivate every possible effort. Consequently, when we find a child abandoned, parents gone for parts unknown, relatives indifferent or even impossible to trace, we have the very best reason to suppose that there is a high probability that the family is one which did not measure up to accepted standards of family responsibility even in its days of comparative comfort and lack of stress, or they would not have solved their obligation in such a selfish way. There is nothing insignificant in the study of an individual. The family that deposits a child on a doorstep and drops responsibility thereby has left an ineradicable statement of this lack of

family responsibility and social solidarity. The mother who can remember nothing about her child's infancy detracts from our data on him in one respect, corroborates an hereditary handicap on the other. Even the voluminosity of the report from an agency handling a child has a definite bearing upon our consideration of him. Too often he is only an object about which to centralize reports. It is important to know this.

In general, the gathering of family and personal history is a way filled with difficulties. To begin with, one must accept items given in the light of the individual giving them. This means, practically, the psychological evaluation of the individual and often leads to the necessity of cross-referencing and investigations which mean deferring judgment and action for days and weeks. For instance, one Sunday afternoon several years ago a well-dressed, highly-intelligent looking man came stalking into the clinic with three small copies of himself trailing in step-fashion behind him. He wanted help and advice as to what to do with them. He gave a seemingly straightforward story. His wife, the mother of the three children, had died. He told of her jealous love, lack of desire for children, and loss of love for him when the children came and explained that the children had stopped developing rightly soon after her death. He confided that he had married again, but that his second wife was insane, and did not care for him, and he was going to try to have her committed. He told, with demand for secrecy (not noticing that this was not granted), that he was an inventor, and had been on special assignment to work out airship problems all through the War. His conversation was erratic and bombastic. He was absent-minded and lost track of the conversation at times. He told in detail his whole life history, including a definite description of illness symptoms which were such as would make one question beginning paresis. At this interview he

gave a "good" family history, with only one peculiarity, the report that nearly every individual in his own family had died of the same complaint, a "dropsical tendency." His phraseology in giving these reports was the first clue to the unreliability of the data. Asked the cause of death of an aunt he said that he was not sure, but it was "possibly dropsical." In the same way another individual had "dropsical phthisis."

Time necessitated closing the interview without completion. The children were all abnormal, the younger two having some definite cretinoid symptoms and yet being atypical. They were brought back for resident observation the next day and, at this time, the father, being relieved of the strain of providing for them for a little while, became more confidential. He told how he had been watched by spies all through the War. At a third interview he was told that at least one of the children had congenitally acquired syphilis in an active form, although all three showed signs of it. He denied all possibility of being responsible for their condition, yet he gave us a good many of the diagnostic symptoms. He mumbled in talking, heard poorly at times, was ambiguous in conversation, bombastic, unemotional save in attributing emotion to himself in his conversation. His mannerisms were extreme, indicating his over-sexed nature in every possible fashion. He fabulated, was oversuggestible, fatigued very easily, intake was impaired, yet he was plausible as a conversationalist. He gave a definite history of early headaches, visual and speech disorders, stomach disturbances, and girdling pains. Urged with having a Wassermann test made upon himself, he broke out into the following statement:

There have been many mysterious things going on lately and I even had to go to the Secret Service once about it. They did not seem to think much about it, but of course you cannot tell whether they are investigating it or not. There were many mys-

terious events. I tell you lots of people knew things about me that nobody knew in town, and they must have been investigated by somebody, and whoever it was they were mighty clever and covered their tracks. It started back in 1914 before the War, before we were in the War we talked about the way Germany was going into Belgium over the boundaries and then a lot of mysterious occurrences began.

Once there was a man came to the house when I was not there, and he told the housekeeper that my friends had asked him to investigate, and he said my children were playing on the railroad, and I was to see him at the hotel at some time that afternoon, and I went there and there was no man like the housekeeper said [his wife was living in 1914]. Then nobody knew who the man was and the Board of State Charities said it was not one of their men, because they always tell who they are and this man would not.

And I was awfully surprised at the things people would shoot at me. They would know things that I know they could only have found out of the past if they had investigated back into things for nobody in town knew them. This visitor mystified the woman and she was completely mystified. This woman, and now I will tell you something in the strictest confidence, she came to me in a mysterious fashion. I had a lot of trouble with housekeepers and then she came and she was young and buxom and she fell for me and made up to me and I fell for her, and she made a dupe of me and after it had gone too far she accused me of the worst thing a woman can accuse a man of and then it wasn't true and then she tried to commit suicide. At least, she was unconscious and she told me afterwards that she had tried to commit suicide, and I think she was an agent of theirs.

The only reason I think they were after me is because I was working on a war invention and they knew of it and tried to stop me. Yes, it did interfere with my work. No one can do thinking work with so many worries and interruptions and there was a time when I was very much worried.

I know there were visitors around the house. I never saw them but I knew they were there for I watched and there were always foot tracks around. They were as big as those of a very large foot, about a man that wore a number twelve shoe. They were in the flower beds and places.

For a long time I thought I was marked. I don't think I am the only man that is marked. There are a lot of people. Maybe

in every city in the country and they are all marked. They have a perfect organization. It may be all imagination but it is very mysterious.

It is still a mystery to me. I would meet people on the street and they would be all right and then when I met them in a few days they would look as if to say, "Go away and get out of here" and in that way I knew the mysterious people were at work. I think they got the little children and gave them this disease with a mysterious inoculation. That is how they got syphilis. They tried to get me but I am too careful. Maybe they thought I would take it through the children.

They were after me and they were *Soc.. alistics* [note pronunciation]. They must have told my wife things for she knows about things that happened *before I knew my wife didn't exist.* They are *antiganastic* to me. These Socialists and Bolsheviks are not going it for themselves, they are just agents for this mysterious company. You mark my words there will be another war.

Not a long time ago I was arrested for train clinging. It was on the work train and they arrested me and took me to jail. There was an order against getting on the train when it was going but it was very mysterious that I was the only one arrested and sent to jail when there were thousands hanging on the train.

They are after me all the time but I notice that when we move they are better a little while and then they come back. The children's development stopped in 1914 when they got after me.

Writing to the local court and to the man's physician and employers soon corroborated the evidence which he had so unwittingly furnished against himself. It brought the further evidence that he had tried to have his second wife probated as insane, and the matter had been dropped because his own unreliability was recognized. The only reason that no step had been taken to control him was because he was still capable of earning enough to support his family! This is, again, a lengthy and extreme illustration of the dangers lurking in the literal acceptance of evidence. And yet, perhaps it is not so extreme after all. It is more than probable that a goodly number of our highly colored family histories have been partly "colored to order."

Those giving the data have been aroused to pathological reports by the definite interest and enthusiasm in the family morbidity shown by social workers who expend their energy on the compilation of records without stopping to check the validity of testimony given. A scientific worker checks all such information given from every possible angle. The nearby neighbor, the grocer, doctor, minister and school teacher may all lend splendid assistance in such attempts to validify items which are of extreme importance when they are to be used to determine our methods of handling an individual.

One other item should be stressed. It is far better for the examiner himself, if he begins his work with a subject without any definite information as to the difficulty which has brought the child for examination. The openness of mind with which one attempts to solve the problem is then very different from the preconceived attitude which unconsciously forms itself if the whole history of the case has been obtained and assimilated beforehand. It is no difficult matter to delay getting the history, if the examiner must get it for himself. Parents readily recognize the fairness of such a procedure and usually coöperate far better because fairness is insured. The writer's own preference is to complete an examination on the individual, have time to assimilate it and work up the norms, and then have the necessary interviews at which history is obtained and related to the child's condition as the full observation of him reveals him. This is really a time-saving method, for otherwise one has to get the history at an early interview, then examine the child, and then have another interview to give findings and plan handling the situation. When history is taken after the examination the handling of the case can usually be discussed at the same time.

To the reader this probably looks like a long and roundabout way of reaching a diagnosis. It is, and yet it is the

only way to reach a diagnosis that will meet the scrutiny of time and bear the light of day a year or two after it has been made. An individual is expensive material, the most expensive raw material that a country produces. Salvaging him has a right to be proportionately expensive. A single wrong diagnosis, wrong in the sense that it leaves for custodial care, as a dependent, an individual who might have been saved for comparatively satisfactory self-support, is an extremely expensive error from the standpoint of the individual, the community, and, naturally, from the standpoint of the obligation of the psychoclinician. It pays to be conservative in diagnoses, and the checking of psychological findings by data gathered on other aspects of the case is one of the best methods of promoting this conservatism. On the other hand, it is no unusual thing for the psychologist to have brought to him a child who is almost or entirely past the age where corrective work is possible and to find that the parents have been depending for years upon the optimistic diagnosis, "He will be all right when he reaches his teens." This is no less opprobrious than the other extreme. In both instances one can see back of the diagnosis the desperation of an individual who actually *did not know,* and who fitted his insufficient bits of knowledge to the handling of a problem which lay outside his province. The worker who is seeking truth in what he does will again and again be confronted with cases in which he will not be able to settle the matter definitely, and in which the only honorable professional thing to do is to admit that he does not know, that the diagnosis must be deferred awaiting further developments, or, in some instances, referred to those who would be more apt to know. Until one can do this without self-consciousness, simply because it is the natural thing to do, he has not come into his own as a diagnostician.

But even when one has made a clinical diagnosis, the

validity of it is not so efficacious, nor its significance so great, as usage had tried to make it. A diagnosis, be it ever so good, is but a statement of the individual's condition at the time of the examination. In general, this must be differentiated from prognosis. In some cases, diagnosis naturally involves prognosis. In other instances, its usage thus can spell nothing but disaster. We may truthfully say that an individual who is once feeble-minded is always feeble-minded, assuming a correct diagnosis. We cannot say once insane, backward, dull, bright or psychopathic means always insane, backward, dull, bright or psychopathic. Prognosis as an exact prediction is still in its infancy. Following cases at present under observation for ten or twenty years will throw much light upon the accuracy or error of our handling and prognosing of them. In the meantime, prognosis is largely empirical and is based upon the experience of the clinician.

CHAPTER VIII

RESULTS SO FAR OBTAINED

To many, an examination has been completed as soon as they have finished working with the child and have counted up the test scores. Even the calculation of intelligence quotients has been facilitated by the invention of slide rules and charts for that purpose. The application of the diagnostic terminology follows, with statistical ease, either when I.Q.'s are used or when the mere relationship of mental and chronological ages is used. Most problems of intelligence evaluation are actually left untouched by such a concept. Many difficulties are actually raised by such singleness of outlook upon the matter of clinical diagnosis. It is well worth our while to review some of them.

First, let us recall the concept of feeble-mindedness which was generally accepted in this country at the beginning of the mental-test era, that is to say, about 1910. A feeble-minded person was one who was incapable of living as others in the community because of lack of intelligence. In extreme cases he was not capable of even feeding or dressing himself. In less marked cases he was incapable of protecting himself from ordinary dangers, and in still less pronounced cases he was distinguished because of his inability to make good economically. The most widely accepted definition was that of Tredgold.[1] He stresses the fact that feeble-mindedness is not merely inferiority such as could be described by a formula of normal amount of mind minus a certain quantity, but it is a definitely pathological condition which is produced by some disease and

[1] A. F. Tredgold, *Mental Deficiency.*

which exists from very early age, if not from birth. He differentiates it definitely from dementias that are the result of degeneration of the neurones and from the insanities which are manifestations in behavior of the *functional* disturbance of the nervous system.

Perhaps a better definition is that of the Royal Commission of Great Britain, especially that section which relates to the higher grade feeble-minded. They describe him as "one who is capable of earning his living under favorable circumstances, but is incapable from mental defect existing from birth or from an early age (*a*) of competing on equal terms with his normal fellows or (*b*) of managing himself and his affairs with ordinary prudence." This is the "high-grade feeble-minded" individual.

Before the era of mental testing, this high-grade feeble-minded person, whom the English called "feeble-minded," the French *debile,* and for whom the American Association for the Study of the Feeble-Minded accepted the term, "moron," was not a person of great importance in the study of social problems. He was considered rather an infrequent anomaly, less in need of care and study than idiots and imbeciles. The discovery of the great number of such individuals must be credited to mental tests. It took something impersonally ruthless, uninfluenced by a pretty face or glib words to accurately estimate the low level of mentality of many cases who had formerly been considered purely social or behavior problems. Of course, the natural result was an extreme overemphasis of the intelligence aspect of such cases.

The first couple of years of using mental examinations brought results that have never been fully explained or fully accepted. Overconfidence in the diagnostic perfection of the earlier Binet series led to highly startling reports of the percentages of the feeble-minded found in various institutions for delinquents. Goddard and Gif-

ford found 66 out of 100 cases seen in the Juvenile Court in Newark, New Jersey, to be feeble-minded.[2] They used four years of retardation as their criterion for differentiation of the feeble-minded. The fact that the scale used practically stopped at the twelve-year level was not considered any reason for limiting its usage to children of commensurate age. No test other than mental age was applied. Pintner, using the same Goddard revision of the Binet, found 46 per cent of children in the Columbus, Ohio, Juvenile Court to be feeble-minded, and another 21 per cent seriously backward.[3] On the other hand, Bronner studied 505 delinquents in the Chicago courts and found less than 10 per cent feeble-minded.[4] Undoubtedly the fact that she did not examine any children who were thought normal by officers and teachers greatly influenced her findings. Haines studied 1,000 delinquents in the two industrial schools in Ohio.[5] By the Goddard-Binet, he found 57 per cent feeble-minded, whereas by the Point Scale he found only 29 per cent low enough to permit being diagnosed thus. Analysis of the differences showed that the Binet was too hard in its rating of older children. Haines undoubtedly felt the imperfection of the study for he concludes:

> What is most important to the judge and to other arms of the social service dealing with the delinquent adolescent—his ability to learn and to perform, his adaptability, the character of his loves and hates, and the tenacity of his purposes—must be

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[2] Mrs. E. Garfield Gifford and Henry H. Goddard, "Defective Children in the Juvenile Court," *Training School Bulletin*, January, 1912, pp. 132-135.

[3] Rudolph Pintner, "One Hundred Juvenile Delinquents Tested by the Binet Scale," *Pedagogical Seminary*, December, 1914, pp. 523-531.

[4] Augusta F. Bronner, "A Research on the Proportion of Mental Defectives Among Delinquents," *Journal of Criminal Law and Criminology*, 1914, pp. 561-568.

[5] Thomas H. Haines, "Mental Examination of Juvenile Delinquents," publication of the Ohio Board of Administration, 1914.

learned by further testing and study of the organization of his personality.

Bluemel tested 200 delinquents in Judge Lindsay's Juvenile Court.[6] Finding the tests inadequate for children over twelve, he considered the adult tests "as a whole," and estimated "the general intelligence that the answers reveal." Using this method of evaluation, he still found 26 per cent of the group mentally defective. He then attempted a comparison with normal school children and, trying to use Goddard's criterion of "more than three years backward" as a means of determining feeble-mindedness, fell into difficulties. He found that from Goddard's own data 8.5 per cent of the children were "three years or more" retarded, although Goddard reported only 2 per cent. The difference undoubtedly lies in the fact that Goddard interpreted "more than three years" to mean four years, whereas to Bluemel it meant as little as one month over three years of retardation.

But to what purpose do we recall these various and incidental reports of feeble-mindedness and their varying frequencies as found by different investigators? There is no need to enumerate the many other studies in detail save as they show other angles of the problem, for they have been most capably brought together by Williams in his recent study of the intelligence of delinquent boys.[7] He follows, in his analysis of 470 cases, the I.Q. differentiation laid down by Terman and presents not only data on the Stanford-Binet, but supplements it by personal and family history, medical data, conduct records, and home investigations. His feeble-minded group contains 141 cases, or 30 per cent of the group. "It includes cases who show indica-

[6] C. S. Bluemel, "Binet Tests on Two Hundred Juvenile Delinquents," *Training School Bulletin*, December, 1915, pp. 187-193.

[7] J. Harold Williams, "The Intelligence of the Delinquent Boy," Journal of Delinquency Monographs, No. 1.

tions either by reason of low I.Q. (usually below 75), or by social data, or by both, of being unlikely to develop sufficient intelligence at maturity'' to manage their own affairs.[8] Despite this seeming liberality of view, no child with an I.Q. under 70 was diagnosed as other than feeble-minded, and no child with an I.Q. over 93 was diagnosed as other than normal. Although he reports in his conclusion that 4 of the 470 cases were insane and that ''there are a number of cases which border on insanity,'' this condition does not enter into the diagnostic classification. He also reports 42 per cent of his cases as extremely nervous. One of his other conclusions is worth reproducing exactly. ''That delinquent conduct in persons of average or nearly average-normal intelligence may in some cases be explained by the inability of persons, through inherent weakness, to inhibit certain natural tendencies.''

Williams has given us by far the most painstaking of recent studies, but like the earlier contributions which are reviewed, he leaves us without a definite, comprehensive, and well-validated plan for the problems we meet in these cases. Goddard's earlier work, Pintner's, Haines' and the multitude of other studies made between 1908 and 1916 or 1917 were highly intensive, one-aspect studies. The tests worked with gradually improved, but even to-day the mathematical concept of test usage persists. A discussion of three years backward or four years backward as the basis of the differentiation of a feeble-minded child from a non-feeble-minded one is absurd. Feeble-mindedness is not a thing dependent solely upon the relation of chronological and mental age. It is fundamentally a statement of social ineffectiveness and the probability is that we shall work many years more before we find a test which will exactly evaluate ability to just get on from disability. Williams' idea of using collaborative data is right. One cannot hope

[8] *Ibid.*, p. 176.

to make a final diagnosis of a case without studying more than the intelligence level. Haines saw this in pointing out the need for studying other abilities. Nor has the striving for something more than mental-test level been limited to any one group. Healy's whole emphasis of the delinquent as an individual is a recognition of the inadequacy of any one test, the only trouble being that he has individualized his case studies to such an extent that it is almost impossible for the lay reader to generalize them back into facts which will help his own work.[9]

Kuhlmann is meeting the same difficulty of handling I.Q. diagnoses and prognoses.[10] In a study of 600 cases examined repeatedly at the Faribault institution for feeble-minded children, he finds 4.8 per cent who gain at more than normal rate of mental growth and 16 per cent who lose standing. Some children gain until "they attain an I.Q. of 100 or more." There seems to be more deterioration after the age of ten than before. Here again there enters a factor of uncertainty in applying tests for diagnostic purposes. Unfortunately, case histories are not available for analysis or some light might be thrown upon these unexpectedly developing cases.

A number of briefer studies also stress the point that there is something not entirely satisfactory in mental-age diagnoses. "When is a moron not a moron?" asks Jones in a brief article which stresses the need for other than mental-age criteria, for of those with low level in the army "a large percentage were meeting the social criterion for normality and consequently could not, by the most elastic use of the term, be considered as feeble-minded."[11]

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[9] William Healy, *The Individual Delinquent.*

[10] F. Kuhlmann, "The Results of Repeated Mental Reëxaminations of 639 Feeble-Minded over a Period of Ten Years," *Journal of Applied Psychology*, September, 1921, pp. 195-224.

[11] Carroll T. Jones, "When Is a Moron Not a Moron?" *Journal of Delinquency*, January, 1920.

Another aspect of the problem is added by Porteus.[12] He points out that mental age is not sufficient as a basis for diagnosis of feeble-mindedness, which is social incompetence, and which can often not be determined until the adult stage has been reached. He also brings in an objection to tests on the basis that the high-grade feeble-minded may often support themselves "for a time," "under specially favorable conditions," citing as an instance of this the need for labor during the War.

This reminds one of the work being accomplished by Bernstein without much sympathy, understanding, or even approval, from other institution heads. Under his inspirational care the custodial institution at Rome, New York, has become merely a central training home and clearing house for the proper industrial placing of many boys and girls whom others would consider hopelessly in need of permanent institutional care. Training, supervision, gradual independence have done much, even with such cases as courts will commit in a state where demand for admission far exceeds space to receive. How much might we not accomplish with the less obviously feeble-minded?

Clark concludes from a study of some socially irresponsible individuals that "formal intelligence tests alone cannot always be considered adequate criteria of defective mental development," but that we also must weigh the ability of the individual to coördinate and make use of past experiences so as to meet successfully the problems of the present.[13] As an illustration for this thesis he presents the case history of a woman in whom "mental deficiency cannot be demonstrated by the Binet-Simon scale," but who, despite high-school standing, becomes immoral, is a failure as a wife, contracts syphilis, continues indiscretions

[12] S. D. Porteus, "New Definition of Feeble-Mindedness," *Training School Bulletin*, March, 1921, pp. 7-10.

[13] S. N. Clark, "The Criteria of Defective Mental Development," *Journal of Psycho-Asthenics*, December, 1917, pp. 80-88.

and finally needs hospital care, proving untrustworthy when on parole.

From an entirely different angle, Wells and Kelley present the same criticism of mental tests.[14] They examined 102 cases of mental disease. After demonstrating the variability of I.Q.'s in the group, they conclude with the statement, "Similar intelligence quotients appear in extremely differing personalities, and normal ones (I.Q.'s) in the presence of grave mental unbalance. The factors in mental adjustment are capacities for dealing with men, with things, and with ideas. Intelligence scales deal with the last of these."[15] This leads to their final statement, "Intelligence is without marked relation to the development of psychoses."

From the educational field comes another criticism of the ability of mental age to determine what is going to happen. Gillingham has been following the development of precocious children and relating it to their educational success.[16] She concludes, "The possession of intelligence does not insure its steady and successful application. It may be the most important single factor in academic success, but it is not enough." She enumerates as some of the difficulties met in some of the precocious children studied, slowness or inaccuracy in muscular control, "laziness," that is, inertia in a self-projected task, inaccuracy in details with knowledge of principles and general relationships, social immaturity, neuroticism, and the egocentric self-satisfaction that prevents social service.

The meetings of the American Association for the Study of the Feeble-Minded may well be taken as a conservative index of experience molding professional opinion. Even

[14] F. L. Wells and C. M. Kelley, "Intelligence and Psychosis," *American Journal of Insanity*, July, 1920, pp. 17-45.

[15] *Ibid.*, p. 38.

[16] Anna Gillingham, "Superior Children: Their School Progress," *Journal of Educational Psychology*, September, 1920, pp. 326-347.

there, the last couple of years have shown the critical attitude towards diagnosis developing in a constructive fashion. Beier reports a definite percentage of dementia-præcox cases among the inmates of the Wisconsin institution for feeble-minded. Experience with these cases leads him to to the statement that despite our present test refinement, "we have not gone sufficiently far in our study of the condition, and that in this respect, our tests are, as formerly, inadequate."[17] Emerick, Bliss, and Murdock not only approve of this statement but add corroborative examples from their own experiences.[18] Of course, these men are not clinical psychologists.

Healy[19] and Fernald[20] are more interested in the relation of diagnosis to delinquency, and add still other problems to the present maze of test significance. Healy suggests that the whole situation suffers from overgeneralization and that many more elements need consideration. "The bare statement of an age-level rating in the usual way is weakly inadequate in many instances for the prophecy of what will or will not happen concerning the development of future delinquent tendencies." He particularly urges consideration of special abilities, environment, and past experiences. Fernald emphasizes the fact that we need to do more for the defective delinquents who are "extra-institutional feeble-minded" . . . "not suitable cases for any institution, but are of a higher grade of intellectual ability than those found in the schools for the feeble-

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[17] A. L. Beier, "The Incidence of Dementia Præcox Among the Feeble-Minded," *Journal of Psycho-Asthenics*, Vol. 24, pp. 89-98.

[18] Report of the annual meeting of the American Association for the Study of the Feeble-Minded for 1919, *Journal of Psycho-Asthenics*, Vol. 24.

[19] William Healy, "The Diagnosis of Feeble-Mindedness in Relation to Social Prognosis, especially Delinquency," *Journal of Psycho-Asthenics*, Vol. 24, pp. 69-74.

[20] Guy G. Fernald, "The Defective Delinquent since the War," *Journal of Psycho-Asthenics*, Vol. 24, pp. 55-64.

minded'' . . . ''who develop vicious tendencies.'' He recognizes the need for psychiatric work with such cases.

To any one reading over these brief citations of opinions and findings uncritically, they can but present an incoherent, ill-assorted mass of variables. But there is in and behind them a unity of causation. They are all, without exception, expressions of one thing and of only that one thing, namely, dissatisfaction with or disproof of mental-age tests and of diagnoses upon the basis of mental-age tests. To summarize: Their complaints are that feeble-minded children sometimes test normal. People testing feeble-minded are capable of taking care of themselves. I. Q.'s do not always come anywhere near being prognostic. There are ''defective delinquents'' whom mental-age tests pass. There are precocious children who do not make good. Insanity may be there regardless of mental level. And then there develops the suggestion for other lines of consideration—environment, experience, heredity, and the more recent suggestions for the concentration of psychological efforts upon ''character study.''

But why the need for the study of character? Significantly, these suggestions come from the group who are more interested from the medico-psychiatric viewpoint than from the psychologist's angle. What is character? What is personality? Where do they find a place in a behaviorist's psychology? The earlier attempts at mental testing assumed that delinquency went hand in hand with inferior mentality and was really a social effect of the mental condition. To a certain extent, the contention was and is true. However, it is the recognition of the not-feeble-minded-by-mental-age delinquent which has precipitated this demand for other lines of study or analysis. And how much easier to grasp the idea of studying some definite thing such as ''character'' than to resolve character back into its relation to mentality, especially when clinical experience *seems* to

show that the two differ independently. The writer has no desire to deviate into a discussion of temperaments, personality attributes, character or will-determinants. The philosophic energy of centuries has considered these matters until the resolution of them into factors clinically analyzable is more than a brief aside could handle. On the other hand, for the writer, such an attempt would be useless, for practical clinical experience has shown not even the remotest need for calling into existence any such attributes. It is undoubtedly the difference of the psychological principles under which various workers practice that brings such questions to the fore or eliminates them entirely.

A working theory of clinical psychology must be essentially behavioristic. The clinician should by all means be able to introspect, for only by turning his gaze inward may he, through self-knowledge, know in part the workings of the minds of others. But he cannot expect reports upon the minds of others in the same way. Introspection is difficult enough when one has a supposedly normal and trained mind. The clinician rarely gets a normal mind to study, let alone a mind psychologically trained. His work lies with those to whom living has brought problems they cannot meet, presumably because of an intelligence defect or deviation. Consequently, there is but one course open to him. Since he cannot know by report the actual "inwardness" of the situation, he must establish so far as possible an objective way of measuring that mind's social normality and social worth. In terms of everyday life, this thing to be measured is the individual's behavior. It does not matter how delicate or how crude the structure, the evaluation must be made in terms of the achievement of the structure.

But is a simple, yet coherent theory of human behavior upon such a basis possible? Not only possible, but in actual usage. Our mental-test series are tests of the behavior of an individual under certain standardzied conditions. We

are able to rate him on these series only in terms of his accomplishment as it compares with the performance of others whom we have tried out under similar conditions. The behavior of the great majority of the group under a certain condition constitutes the norm or common type of behavior in response to that situation. The individual who responds otherwise is consequently a-normal, and sometimes abnormal, in that respect.

Perhaps a brief outlining of the general theory of human behavior, or nervous-tissue response will give a better understanding of this way of looking at the problem.

When a child is born, he is an organism of potentialities and actualities. He is a highly complex structure with one marked attribute, that is, an ability to sense things from the world around him and react to them. This ability is not limited to sounds and sights but is, as we well know, a sensitivity to all sorts of stimuli. Perhaps the best word to express the general characteristic is that chosen by Verworn, irritability. We must not, however, in any way confuse this usage of the word with our much narrower everyday understanding of it. The child is an irritable organism. Irritability is the normal behavior attribute of his whole nervous system. At birth some parts of this nervous system are all ready for definite activities. The nerve patterns of response have developed during uterine life. Sucking, grasping with the fingers, and crying are such patterns. Reflexes, we call them. These are nerve habits which have been determiners of survival for the race. A few other predetermined reflex patterns complete development after birth. These reflexes promote those habits of action which we designate from the psychological viewpoint as the instincts.

This does not mean that a child's future is determined in its specific characteristics at the time he is born. The greater part of his life's activity will be, not reflexes and

instincts, but behavior which represents an end product of the relation developed between the demands the environment makes upon him and the ability of his nervous system to meet that demand. Each and every detail in the environment of an individual may affect his behavior at any one time. Each later act in his life is definitely modified by *all* behavior which he has experienced up until that very moment.

Perhaps it will be well to explain a little more in detail just what this means in concrete situations. A baby cries when it is hungry. At first it may keep on crying, even when in the mother's arms, until its mouth touches the breast. Soon, however, being lifted from its bed will change the hunger cry into a half-impatient, half-contented, gurgling cry of anticipation. The association of change of position with being fed has been established. Later, the mere sound of the mother's voice may have the same effect. The actual hunger condition is not modified before feeding, but these other related factors have become what we call "conditioning stimuli," and the child's behavior is not directly and completely the result of his physical state, but it is also modified or conditioned by these other factors.

Gradually, as the child grows older and is subjected to many and varied experiences, all sorts of such series of conditioned acts arise. Our daily life is made up of them. It is because we *do* learn to respond to these indirect factors in our environment that we save the need for constant thought and anxiety over each detail of our lives. Not only does the direct reason for an act precipitate that act, but gradually each incidental factor in the environment at the time of the act takes on a certain ability to provoke the same response. This is associative learning.

The principle of the saving of nervous energy through associative learning was first demonstrated by the Russian physiologists working under the leadership of Pavlov.

Although practically all of their early work was done on dogs, the principles have been found to hold true for children. Pavlov [21] worked with the feeding reflexes, devoting most of his time to the study of factors influencing the secretion of saliva and gastric juice. The experimenters trained their animals to expect food at a certain arbitrary signal; it might be the sound of a bell, the glowing of a red light, the moving of a lighted figure. In all cases the repetition of this absolutely extraneous factor in relation to the feeding soon developed enough of a suggestive power to condition secretion of the gastric juice and saliva *whether* food were presented or not. The artifically selected stimulus had become a conditioning stimulus. Acts thus conditioned are usually spoken of as artificially conditioned reflexes to distinguish them from acts conditioned by things *naturally* related to them.

A queer way to approach behavior peculiarities of human beings is the thought that idly passes as one reads. And yet, the very fact that unbiased work in this field was not seemingly connected with our problem in any ulterior fashion makes it more fittingly and reliably used in our study of behavior. Pavlov and his followers were so uninterested in our problem that the applicability of their findings must be due to the fundamental soundness of their data which were gathered in a manner uninfluenced by any desire to make their findings solve our problem.

Their principles of associative learning and indirect conditioning of reactions do apply to human individuals. Following the work of Krasnogorski,[22] the writer found it pos-

[21] Ivan V. Pavlov, *The Work of the Digestive Glands*, translated by W. H. Thompson.

[22] N. Krasnogorski, "Ueber die Bildung der Künstlichen Bedingungsreflexe bei Säuglingen," *Russki Wratsch*, No. 36, pp. 1245-1246; "Ueber die Bedingungsreflexe im Kindesalter," *Jahrbuch für Kinderheilkunde und physische Erzeihung*, Vol. 19, pp. 1-24; Ueber die Grundmechanism der Arbeit der Groszhirn bei Kindern," *Jahrbuch für Kinderheilkunde und physische Erzeihung*, Vol. 28, pp. 373-398.

sible to develop signs of the expectation of food in even tiny babies by the repeated presentation of some artifical factor in relation to the actual giving of food.[23] Not only do these conditioned reactions develop, but they fade, disappear, redevelop and persist with a law-like regularity. They influence all realms of our everyday life. The child who eats only from a certain plate or with a certain spoon has developed an artificially conditioned habit. The man who can write only with a certain pen or at a certain table has developed a reflex artificially conditioned by shape, or size, or resistance in the first instance, by height, position, or light in the second case. Let us take a different type of situation. A Mr. Thuring was in the habit of eating breakfast in a restaurant, with his newspaper propped before him. A change in the conditions of his work led to a much longer trip on the cars during which he read his paper. Arriving downtown he ate breakfast, as leisurely as usual, but without reading. Several weeks of this changed habit brought actual nervous indigestion resulting in sufficient discomfort to practically stop his professional work. Analysis of the condition revealing first a "lack of desire" for breakfast soon brought out the change of habit. The substitution of other reading on the car and the reëstablishment of the old breakfast reading habit soon stopped the trouble. Appetite and digestion were definitely conditioned by the reading habit.

Nor is the matter different with children. A baby is allowed to sleep in a lighted room several times. Soon it is impossible to put her to bed in a darkened room. A child learns that "please" is a necessary part of asking for a desired thing, another never has the conditioning formed. One small backward baby with whom the writer worked used to say "Bah," for bottle when he was tired and wanted

[23] Florence Mateer, *Child Behavior: A Critical and Experimental Study of Young Children by the Method of Conditioned Reflexes.*

to go to bed. Last spring his physical condition necessitated the introduction of a daily dose of mineral oil to be given a half hour before he went to bed. In the third week of this new regime he very definitely surprised us by dropping his request for his bottle and substituting the word "oil." He had formed the conditioned reflex even though the time element made the relation of oil to bed a distant one and, despite his extreme dislike of the oil, he accepted the relation, tired—oil—bottle—bed.

But the effect of all in our environment upon what we do is not limited to such isolated items. It is the logical consequence of having an organ of economy, of energy, of intelligence, a brain. Let us follow its application through some one phase of development common to us all. Speech itself is a series of conditioned reflexes. Speech is simply a practical utilization of the various sounds of the human voice. There is nothing mysterious about it. If we pause a moment we can easily imagine its early beginnings. A danger call, the child's hunger call, a feeding call, a call for help, the mating call. Gradually, the specialization of sounds for the very special things of life and the imitative sounds for things heard came in. Gestures and intonations filled in the meaning and finally there developed the many, varied, more or less complete languages of to-day. But how does the child learn these? The ability to make sounds is one of his physical assets. The ability to make them correctly depends upon his intelligence. The process is merely the setting up of a definite relation between an object and a certain group of sounds, or an act and a certain group of sounds. Out of the constant conversation that surrounds a baby, he grasps gradually one group and then another and imitates them. "Water" successfully, or even partially pronounced, brings that which quenches his thirst, other sounds bring food, beloved toys, beloved persons. "Go," "up," "jump," and "bye" soon have definite associations

with certain acts. Because of these associations, the child, wishing a repetition of the act, will reproduce the sound for himself when no one else does, and speech in its elemental form is present. Those who have studied a new language by the natural conversational method will have no difficulty appreciating this. It was simply a matter of associating the sounds of the new tongue with familiar objects. The sight of an apple leads one to say "*pomme*" or "*apfel*" instead of the usual group of sounds. In varying complexity the whole task is just developing a group of new associations.

Such conditioned associations are not limited to those which are formed between objects and actions. They form in relation to the feelings also. If one experiences a great emotional crisis or disturbance under certain conditions, many of the irrelevant factors in that situation will afterwards be as fully capable of arousing the emotion as the original cause itself. Indeed this tendency of the nervous system to make conditioned associations which may then function without any so-called consciousness of the reason for their activity is the basis for psychoanalysis and corrective as well as preventive mental hygiene. Every one has experienced this propensity for feeling to develop *without apparent cause.* One person cannot endure the fragrance of lilies-of-the-valley. Their presence in a room almost produced hysteria until analysis brought back the memory of them as a sheet covering the casket of a dearly loved baby. A person troubled definitely with insomnia always sleeps well, free from depression, on a rainy night. Analysis reveals the following situation. In early childhood, the individual suffering from this difficulty heard a denunciatory sermon picturing vividly the end of the world and general conflagration. For several years she was repeatedly subject to a vivid terrifying dream in which everything was burning and would awake with an overpowering fear which

could only be eased by making sure that the sky had not turned red. Nights when it rained, her fears rested, soothed by the belief that the fire could not come when the earth was so wet. The incident dropped out of memory but the emotional setting remained, not understood until traced back by analysis. Even now, although this is definitely understood, the pleasure of hearing rain at bedtime always insures a good night's rest, undoubtedly a conditioning of sleep by factors not usually influencing it.

But what bearing does all this have on the problems of clinical psychology? First of all, it emphasizes a totally different side of the matter from that stressed by mental-age theorists. To a certain degree mental-age problems relate themselves primarily to the amount of intelligence and hence to the amount of mental development the individual has. The whole method tends to produce this attitude. Mental-age is a measurement of the amount, the level, or grade or stage of development. It is checked for its actual significance in the individual case by measuring it in relation to the chronological age. Our customary evaluation of it is a mathematical ratio, the intelligent quotient. A behavioristic attitude may well be held in the study of mental level. The mental-age is the indication of the ability to react or "behave" as children of a certain age do. But, there is another side of the whole matter which has been very much neglected heretofore. Clinics have studied children of all ages and adults. Mental ages have been computed for all sorts of groups from state hospital inmates to the draft army. But all of this computation deals with the problem of the *amount* of intelligence, or mentality, or neural response, that the individual has.

There are other aspects of the problem that justly deserve consideration. The army tests [24] showed that there

[24] Edgar A. Doll, "The Average Mental Age of Adults," *Journal of Applied Psychology*, Vol. 3, 1919, pp. 317-328. See also "Psycho-

were many men of 9- and 10-year levels in the army who were fully capable of conducting their own affairs in a prudent fashion. Previous to this, 12 years had rather arbitrarily been taken as the lowest level of intelligence that could well take care of itself outside institution walls. The institutions for the feeble-minded have great numbers of inmates who test 10, 11, 12. The writer has seen and examined custodially committed and accepted cases with mental ages as high as 16 years. Yet these high-grade institutional cases are known failures, for it is their failure to meet social, moral, or economic demands which has caused their commitment. These two facts, some individuals testing as low as 8 and 9 years mentally can get along in the community, other individuals testing 12, 14, 16 cannot, brought out by widespread usage of tests would in and of themselves be sufficient to disprove the validity of mental-age as an all-sufficient basis for the diagnosis of intelligence conditions, were we unaware of the various unamalgable findings summarized briefly at the beginning of this discussion.

One tendency is to reply to this criticism by pointing out that feeble-mindedness is a social defect and so not exactly subject to intelligence analysis. This is merely a philosophic evasion of the situation. As a matter of fact, one's reactions as a member of the social group are the reactions of his nervous system, and as such they are highly dependent upon the working ability of that system. But there is more to the working of a human organism than the mere study of the amount of its development. The ability to remember, to imagine, to comprehend, to think, to decide are the intelligence attributes of the human organism as we study his behavior psychologically.

Beyond this there is another possibility—one which the

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logical Examining in the United States Army," compiled by Robert M. Yerkes, *Memoirs of the National Academy of Science*, 1921.

mental-age adherents do not seem to recognize, that is, the question of mental function. It is not enough to know how far an individual's mind has gone in its development, one must learn also how *that mind, which he has, works.* Perhaps the easiest way to differentiate these two phases of study is through the terms "level" and "function." The study of the behavior of that intelligence which an individual has is not a very well-developed method from the psychological standpoint. And yet there seems to be no good reason why it should not be. As early as 1909, Binet published an article on feeble-mindedness and dementia paralytica.[25] After making a detailed study of the test reactions of some dementia cases, especially of general paralytics, he points out means by which these cases may be differentiated from the imbeciles whom they so closely resemble when an advanced stage of the disease has been reached. It is really impossible to present the matter in better form than that which Binet uses. The need for this study, he argues, lies in the lack of clearness of conception used by psychiatrists themselves. Descriptive psychological terms they have used for a number of years, but "intellectual weakening," "lack of mental synthesis," "incoherence of the association of ideas," are terms inexact and empirical. Binet offers, instead, the exact examining of a case, by intelligence tests, with comparative study of imbeciles to determine the differences, if any, between these two clinical extremes. His experience in this field leads definitely to the conclusion that there *is* a difference. He points out, however, that "one who relied solely upon the results of our measuring scale would not be able to grasp the mental differences which differentiate an imbecile from a general paralytic . . . two individuals may fail in the same

[25] Alfred Binet and Th. Simon, *The Intelligence of the Feeble-Minded*, translated by Elizabeth S. Kite (Training School, Vineland, N. J., 1916), pp. 216-321.

problems without for that reason having similar mentalities; the practical consequence is that the efficacy of their mentalities is the same; but the mentalities may be different . . . our scale gives the actual level of intelligence without analyzing it and without informing us as to the type of mentality."[26] He chooses as a theorem the idea that dements "remain virtually in possession of all their intelligence but that they have difficulty in making use of it." This difficulty of functioning is essentially pathological and "consequently it would only be by chance, by a wholly exterior resemblance, that the paralytic could be compared to an imbecile and especially to a child." This hypothesis allows us to "foresee that children, imbeciles, and paralytics are alike in their inability to solve the same problems; they are stopped by the same obstacles so that we can attribute to them the same mental level; but the identity of the results in no way implies the identity of mechanisms; the mentalities remain distinct."

His generalizations on this matter must needs be quoted verbatim:[27]

> It remains for us now to go a little farther and having explained what a disturbance of functioning is, to contrast it with a lack of development. . . . Let us employ first of all some metaphors. Let us take a watch. In the mechanism of the watch there are two things to consider: first, its degree of complexity; a certain watch indicates only the hour, another indicates the hours and minutes, another adds to this the seconds; second, we must consider the functioning of the watch, that is to say the regularity of its movement, its rapidity, the length of time it can go without being wound up, etc. It is this distinction, which is so clear for a watch or any piece of mechanism, that we are attempting to apply to an intelligence, because it seems to us to be a very convenient illustration by which to express the essential difference which exists between an imbecile and a general paralytic, and the numerous points in which the two resemble

[26] *Ibid.*, p. 234.
[27] *Ibid.*, p. 290.

each other. The imbecile has an intelligence but slightly developed; it is, as it were, a rudimentary watch which indicates only the hours, but, so far as it goes, this intelligence functions well; every time this intelligence fails before a problem it is through lack of development. On the contrary, with the general paralytic, it is always the functioning which is at fault, that is to say, the intellectual work. Theoretically, this dement must be considered as an intelligent man who can no longer use his intelligence and whose intelligence betrays him at every moment.

Utilizing this concept, Binet analyzes his own case data and shows that there are differences between dements and imbeciles which are clearly demonstrable by a *qualitative* analysis of test findings. As an end result the discovery of these differences gives, with dementia paralytica at least, a definite "weakening of the whole intelligence." He points out that this is in absolute accord with the psychiatric theory, but with this difference:[28]

For clinicians the disturbance is global (general) because it is manifested in all the functions, memory, attention, judgment, etc., by means of observations in detail but without connection one with another; and because one makes in a way an addition of all these disconnected observations, and one sees that in the dement none of the faculties is spared, none functions normally. For us the disturbance is global, because we see that it results from a certain mode of functioning, always the same, which is found in the whole intellectual activity; for us it is an affair of psychological analysis and not an accumulation and a generalization of particular observations. . . . That which dominates the whole question is the mechanism of the errors produced by the dements. We replace the old conception then by a conception that is more precise. The old conception, according to which the demential states depend upon a quantitative dimunition of the intelligence or upon an injury of all the faculties, was a constant source of confusion. One had indeed the impression that there was something besides this; but whenever the diagnosis of dementia was doubtful, or when one attempted to determine exactly the constitutional elements, the ground that he believed

[28] *Ibid.*, p. 296.

solid gave way under his feet. To the vague and inexact affirmation of a global dimunition of the whole intelligence, must be added, and even substituted for it, the conception of individual errors of functioning, of defects of every sort, which by their multiplication lower the intellectual level and which present the two following characteristics: irregularity and extensiveness, relative to the level of the subjects.

Of course, Binet's discussion is limited to a comparison of two extremes and to merely one type at the demential extreme. However, to any one knowing the mental-level gradations possible on mental-age testings, there is very little difficulty in extending the functional concept in parallel fashion. Mental level is a statement of the intelligence of the individual as it appears at the time of the examination, and the problem that even mental age presents is far from simple. There is, first of all, the mental age commensurate with the chronological age. The large mass of children so testing have been studied merely for the purpose of establishing norms of mental behavior. The earlier assumption was that if a child tested normal once he would test normal a second time, a third time, all his life in fact. It was not many years before exceptions to this assumption were definitely demonstrated. Children who had been tested and found normal stayed at approximately the same mental age through successive years. It was simply a matter of time until they proved sufficiently retarded to be recognized as definitely feeble-minded. On the other hand, backward children do not necessarily remain retarded, and children who test so low that they are regarded as feeble-minded may develop to normal level. Such cases are among those reported by Kuhlmann. Precocious children are just as uncertain. Experimental studies have shown that young colored children are superior in I. Q., when compared with white children of the same age and from the same type of community, although the reverse holds true

among the older children of the same group.[29] What does this mean? What can it mean save the earlier maturity of a more recently civilized race, with the general mental level lower because of the rapidity of maturing. Unfortunately, we cannot be sure this is the correct interpretation for so little work has been done on the subject, although the findings are at least suggestive. But there are other possible complications of this mental-age problem. If we have a child to whom visual sensations carry no meaning other than the simplest, we must necessarily expect failure on tests involving visual comprehension. This may lower the mental-age rating several years. There are many such special defects possible, yet their presence must not in any way lead one to infer inferiority of the individual, save in that special province.

Aside from these cases we have the whole so-called dementia group. Binet amply demonstrated the mental level inferiority of the cases with whom he worked. Wells and Kelley found that the insane may have almost any mental level.[30] In general, the situation could not well be otherwise. Some neuroses bring definite limitation of mental activity, even to the point of seeming idiocy. Others leave the patient's ability to think unimpaired so far as casual observation would allow one to judge. Just how much Binet's interpretation of the inferiority of intelligence level of the dement as being due entirely to inability to function is correct, it would be difficult to say. The matter is at least open to criticism. It is quite possible that there are at least two types of neuroses, one in which functional disability or functional value is disturbed and the other a deteriorative condition wherein the loss is more than mere

[29] Ada Hart Arlitt, "The Relation of Intelligence to Age in Negro Children," abstract of the *Proceedings of the American Psychological Association*, December, 1921, p. 14.

[30] F. L. Wells and C. M. Kelley, "Intelligence and Psychosis," *American Journal of Insanity*, July, 1920, pp. 17-45.

inability to evoke the inactive intelligence. Of course, in using such terminology, the psychologist is not limiting the term functional to the same meaning given it by physicians. Functional in the medical world means "without apparent organic lesion or loss." Function on the psychological side means the *manner* of *behavior* of the intelligence, without any presupposition of the presence or absence of brain lesions, toxicity, or anything else."

If, however, we accept the idea of functional disturbance, of variation in the responsibility of the intelligence which an individual has, then we must recognize more than the functional disturbance of the neuropsychotic, or insane group. There is no definite undisputed line of demarcation between a normal amount of intelligence and feeble-mindedness. Neither is there any definite point of division between normality and abnormality of function. Indeed, each day sees the average member of the community swinging from normal function to more or less ineffective or abnormal function. In a way, fatigue is a normal thing, yet its presence brings disturbances of the working of one's intelligence which would be decidedly abnormal *were one not fatigued.* We forget names, numbers, write words with letters and syllables omitted, make mistakes on check-stubs, carefully misplace valuable data. Were such errata of behavior chronic in sufficient number in an individual, he would undoubtedly be abnormal, yet this would not be lack of intelligence but lack of function of a kind which subserves our goal-ideas. Functional disturbances range from such minute details to the gross incapability and inertia of extreme dementias. In the latter instance, we call the individual a dement, insane, a psychotic, depending upon the aspect from which we are studying the case.

Psychologically, we need, and must have, an identifying term for describing those whose functioning is not normal but not abnormal enough to warrant their being placed in

the psychotic group. The term psychopath is probably the best fitted for this usage. A psychopathic individual would, with the adoption of this term, be one who from the psychological viewpoint deviates from the usual member of society in the quality of his mental activity or behavior. He is functionally disturbed. He does not necessarily tend to become a psychotic, or "insane," but the extreme limit to which a psychopath can deviate from the normal group brings him into the psychotic group. The term psychopathic is, in this sense, as generally applicable to the functional deviate as the terms backward and advanced are to the level deviates. The study of such functional deviation becomes a thing apart and above the study of mental age. One studying such functional deviation is studying a separate, yet closely related, aspect of clinical manifestations—psychopathy.

CHAPTER IX

A NEW ANGLE: PSYCHOPATHY

JUST what is psychopathy?

Mental-age testing is a cross-sectioning of the ability of the individual that gives us a statement of the amount of intelligence with which he is equipped at that particular moment. At the same time this mental-age estimate rates him rather definitely in relation to the rest of his social group. He has as much, more, or less, mentality than the average individual. We modify what we expect of him accordingly. In other words, the mental-age test has given us a rating of his "level." The psychopathy of an individual is a statement of the extent to which that intelligence with which he is equipped works normally, or abnormally. Perhaps a commonplace illustration may make the matter clearer. Every one knows the possible variety in the object meant when a man says, "I have bought a car." He may have bought a Ford, a Marmon, one of the reputed French makes, or the most elaborate novelty shown at an automobile show. The variation in the refinement of mechanism and structure of the different types may well illustrate the different levels of intelligence. Some are far more complicated and capable of far more complexity of action than others. No one using any one of these cars would refuse to admit that it might get more or less out of order. It may run irregularly, stall entirely, develop many varying difficulties. No one could well predict, in the individual case, just what would happen, when or how. The same is true of brains. No matter what a person's intelligence, there is many a possibility that something may "go wrong." A

mind may slow down, accelerate unduly, break down, almost stop, and yet no one would say that this is due to the fact that the individual possessed a certain level of intelligence. This disturbance of the behavior of that intelligence which a man has is a functional thing and may occur with any level of intelligence. Measured psychologically, we call such a disturbance psychopathy.

To reiterate: The study of intelligence level is a study of our intellectual resources, our capital, or our raw material. The study of function is a study of the efficiency of the utilization of these resources. Mental-age ratings give us the presence of, or lack of, intelligence. Functional analyses give us the presence of, or absence of, disturbances of intelligence. Our final psychological estimate of an individual's ability is a summing up of how well he uses the mental equipment he has.

This usage of the word is not identical with the psychiatric application of the term psychopath. The "constitutional psychopath" of Ziehen meant a member of that group of individuals who were neither psychotic nor psychoneurotic but who gave many and definite indications of suffering from psychic abnormalities, especially from those which meant abnormality of emotional expression.[1] The term very definitely assumes the correlated presence of "constitutional" inferiority in the sense of "physical" inferiority. This diagnostic phrase is used very widely and liberally by some clinics, is almost repudiated by others, but in general has met with psychiatric acceptance. To the psychologist the term psychopath or the descriptive adjective psychopathic has no necessary relation to any assumed physical condition, save as physical denotes an acceptance of the theorem that we can have no behavior symptom without some underlying or concomitant reason therefor in the nervous system of the individual. The functional disturb-

[1] Th. Ziehen, *Die Geisteskrankheiten des Kindesalters.*

ance of an individual's intelligence and his indications of a minor or major amount of psychopathy may be considered in relation to their physical substratum, with the inference of its probable etiological relation, or they may be observed independently in the psychological laboratory and related to other symptoms later in assembling all aspects of his make-up into a diagnostic concept of him.

We have reviewed the accomplishment of the psychological world in fifteen years devoted to the study of levels of intelligence. Is there anything but hope in the prospect of our being similarly able to throw some light upon the problem of instability of intelligence, of erratic, queer, peculiar intellectual processes, if we are willing to devote a part, at least, of the next fifteen years to this other aspect of the same problem? The problem is not so new and foreign a one as it may seem at first. We all see daily indications of psychopathy in our friends and in ourselves. We all know psychopaths. The psychopath shows no trait that may not be observed in individuals whom we definitely know to be normal. The difference lies in the degree to which he manifests the trait and in his inability to keep it in effective subordination to his other normal attributes. The world in which we live is a world full of people who show *tendencies toward* such traits as excessive talking (so-called verbalism), mutism, irrational anger, extreme irritability, or ease of acquiring a "grouch," too easily aroused optimism, incoherence, irrationality, automatic habits, perservative conversation on the same subject, too great interest in the subject of sex, overinquisitiveness, solitariness, lying evidently for the joy of it. One half of the world is constantly wearing out and using up energy needlessly because of the irritating inconsequences of the other half. It is not obvious, glaring lack of intelligence that exasperates one so frequently in everyday life but the "peculiarities," "mannerisms," and "oddities," too small to resent, too

great to accept without actual nerve strain. These are the indications of, and evidence of, tendencies from the normal or "common" modes of reacting which we see in our friends and casual acquaintances.

It is not a foregone conclusion that the next step in our argument is that all such tendencies are abnormal. For some years the statement that we are all more or less feeble-minded has had a laughing acceptance which has rendered the bitter truth at least tolerable. It is time to add a corollary. We are all more or less psychopathic. The determining factor is the *degree* of our malfunctioning. By imperceptible degrees the human race ranges from such complete vegetative idiocy that the subject does not even make known a desire for food, to such complete intelligence that almost no limit of ability seems indicated. In the same way there are innumerable gradations between normality of function of that intelligence which an individual possesses and such serious radicalism and inutility of intelligence functioning that the individual cannot be allowed freedom to do as he pleases. Between these two extremes, the vegetative calm of perfect (theoretical) normality of function and the wild disturbances which we call the psychoses, more commonly the insanities, lie the numerous instances of individuals with more or less seriously disturbed function, the psychopaths.

No one can truthfully deny that if we were to select any number of individuals of any given mental age there would still be sufficient difference between any one of the group and all the rest to enable us to recognize him as an individual with "individual" differences. Such differences are the variation which we expect and learn to evaluate not only in the psychological laboratory but also in every activity of our daily life. There is a certain range within which we expect individuals to vary. They lack "character," "personality," "individuality" if they lack such individ-

ual attributes. It is not such indications that we mean to designate when we speak of psychopathy. Only when such an individual variation, or a group of such variations, makes an individual's behavior deviate so definitely from what is done by the social group to which he as an individual belongs that it is impossible for him to live as a member of that group, without definite discomfort to the group, or without violating the social code in such a way as becomes a menace to human progress, may we say that his condition is definitely psychopathic. In all probability the psychopath may be said to fail and fall without this line of demarcation in either one of two ways. He may have some one trait or disturbance of his intelligence functioning that is extreme enough to place him definitely as a social menace or he may have such numerous minor indications of difference of functioning that he cannot live in contact with the group without mutual discomfort. To sum it up again briefly: minor indications of individual differences, minor disturbances of intelligence functioning are a part of the experiences of all of us. Definite allowance must be made for all such variations. The term psychopath should be limited in its application to the individual in whom function is so definitely disturbed that the predisposition to unusual types of reaction interferes with his normal and efficient conduction of his own affairs, even though his intelligence is presumably sufficient to enable him to cope with them successfully. If the psychopathy evidences itself in such a gross form that the individual has ideas which prevent his keeping his place in the social group and lead to the necessity for hospital care and supervision, he has become a major psychopath, one of those definitely recognized as psychotic, or as "insane." A word of warning—until we know, from definite statistical observations, we cannot say that a minor psychopathy in any individual case is necessarily a symptom of a later psychosis, any more than we

now believe that moronity foretells later imbecility or idiocy.

The problem is not a simple one, however. For ease of contrast we have so far assumed that the intelligence showing indications of psychopathy is of a normal level. This is by no means a fact nor even a legitimate supposition. Deviation from the normal in intelligence level and deviation in intelligence functioning may, must, and do occur together in all possible variations. Any one who has worked with the feeble-minded knows that there are "good" feeble-minded. The imbecile in general is not the vicious, dangerous creature that legislative propaganda has sometimes tried to make him. The imbecile whom life has not treated too unkindly may be a good-natured, plodding, efficient-to-his-level creature, as responsible as that level of intelligence can possibly be. On the other hand, another imbecile of the same mental level may be absolutely untrustworthy, subject to any type of behavior without seeming reason therefor, impervious to kindness, a case for the custodial ward. The first case is one who lacks intelligence but in whom the intelligence which he has functious normally. The latter has the same degree of intelligence so far as we can measure it, but his economic and social value is far lower because of his instability of function, his unpredictability of action, or, as we choose to call it, his psychopathy. Nor is it only the imbecile in whom such disturbances of intelligence occur. The excitable idiot is demonstrated in most institution clinics. Despite the extremely low level of such an individual, what little intelligence there is functions abnormally. On the other extreme, the precocious child may use his intelligence in such an efficient and happy fashion that he is a joy to his companions and an object of pleasure to the community. Unfortunately, this is not essentially true in every instance. The precocious child, too, may be so functionally unstable that his future value to the com-

munity or even to himself is a question doubtful in the extreme.

Another complexity lies in the fact that the presence of a definite psychopathic tendency is apt to evidence itself in an actual lowering of the intelligence rating which a child can achieve. The writer does not believe that one can, with any justice to the individual, study the intelligence level of the individual without a consideration of this possibility. Just how this happens may vary from case to case, but, in general, the writer's experience has led to the formation of the following concept. A psychopath has, let us suppose, a normal amount of intelligence according to all the probabilities of inheritance and developmental opportunities. Somewhere, somehow, a factor has been introduced that means irregular or extremely individualistic response to the standard test situations which we present in giving an intelligence test. What happens? No matter what efforts the individual makes, his responses now and then fall entirely without the possible range of creditable answers, even though he actually has sufficient intelligence to comprehend the situation. In some instances his overabundance of feeling or emotion in connection with the subject matter presented keeps him from answering within prescribed times. In other instances his peculiarity of answers is caused by a misapprehension of the task. Such answers give a good indication of his own line of thought instead of indicating adaptation to what the examiner desires. Throughout, the effort to respond according to the test demands causes, because of his greater predilection for other types of reaction, and consequent greater necessity for constant self-judgment and inhibition of many traits, greater fatigue than is experienced by individuals more like the common group. As a result, failure enters into tests rather uncommon, but no rare thing, to find such an unthat are well within the upper limit of his ability. It is

stable child who will score the same mental age after a brief interval of a week or two, but whose test results are gained by success on a very different group of tests, and who fails on many tests done previously. Such frequent repetition of test series is not common and not advisable in the ordinary case. Yet in individuals who are markedly unstable and erratic, whose behavior is often unpredictable, the time spent on such reëxamination is highly worth while. It has been suggested that such variation in responses with similar resultant mental ages is due to "chance" success and failure on tests that are actually a little too difficult for the case under observation and on which he "guesses," scoring a correct answer one time, a failure the next. Careful observation of the examinations of such a child does not bear out this explanation. For one thing, the alternation is not limited to tests in the higher year levels in which the child scores some successes, but may be scattered up and down the scale through the various levels. On the other hand, such a child may lose or gain as much as two years in a few months' time. Indeed, such variability may even affect the basal year on a series such as the Stanford. We have plenty of proof that this is not the usual behavior with backward children. Doll's analysis of a group of feeble-minded children examined repeatedly over a long interval of time is sufficient to demonstrate this.[2] He has also given us the most careful statistical study of the individual irregularity of growth.[3] We may do well to note his conclusion that "marked irregularities in the rates of growth of intelligence among individual children of feeble-minded, borderline, and superior children are demonstrated by growth curves covering long periods of time. The data are insufficient to indicate the periods at which intellectual growth is retarded or accelerated."

[2] Edgar A. Doll, *Clinical Studies in Feeble-Mindedness.*

[3] Doll, *The Growth of Intelligence,* Psychological Monographs, **Vol. 29, No. 2, p. 128.**

Before accepting psychopathy as a factor to be definitely weighed and evaluated in our diagnostic work, let us see whether such a concept fits into the problems we must necessarily meet.

There can be no doubt but that the intelligence level as a cause of abnormal behavior leaves many of our social problems unexplained. Are we to attribute the rest to sheer perversity, wilfulness, and actual desire to do or be wrong? Dullness, backwardness, stupidity, and brightness have developed definite meaning as estimates of an individual because of the possibility of interpreting them into mental ages. But what of laziness, slowness, solitariness, absent-mindedness, forgetfulness, and a hundred other partial characterizations? Medical examinations frequently show no cause for such symptoms. And then there are the whole group of actual behavior problems, the truant, the thief, the gambler, the prostitute, the murderer. Mental-age occasionally explains the actions of some of these, but what of the rest? Is it even probable that a certain proportion of individuals are not responsible for their behavior "because they are feeble-minded" and that all the other not feeble-minded are responsible by very reason of their superior intelligence level? The assumption of a mitigating or extenuating factor in these other cases seems far more logical.

If we were to list all the delinquent acts of the boys and girls brought into court throughout the country, we should not find anywhere in our list a single act but could be paralleled by behavior symptoms taken from the case records of insane adults in any hospital for the insane where complete records are kept. Such a hospital has under its roof the murderer, the liar, the thief, the immoral, the perverted. Greediness, overgenerosity, egotism, revenge, cruelty, wandering, and other similar acts by the hundred are handled there as symptoms of the disturbed condition of the individual's thought processes. Why should the at-

titude towards not feeble-minded individuals who are known to be not insane but who are delinquent or criminal be any less impersonal and scientific? Why should we impose responsibility upon such persons until we know it is rightly theirs?

Practically, acknowledging the presence of possible mental disturbance, wrong functioning, mental disease, explains many problems. But are there other explanations? It seems to be quite a common tendency at present to attribute an individual's antisocial traits as a "throw-back" to his earliest human ancestors, the cave-men. In such discussions the reason for the reappearance of such primitive traits is usually left as a vaguely assumed fault of the inheritance. As a matter of fact, the probabilities that such a chance or sport inheritance would produce such numbers of extreme regressions is rather doubtful. To begin with, early civilization stringently enforced its law upon such deviates. Death, not philanthropic support, settled the problems of deviation until but a few hundred years ago. Punishment in its extreme form kept down the number of delinquents by eliminating them as breeders of more delinquents. Actually, our present-day dependents and delinquents are the waste, by-products, and mistakes of the last few centuries. Disease is probably much more important a factor in the production of such individuals than we now recognize. Indeed, the writer has wondered more than once whether our whole problem is not one of mental disease and whether feeble-mindedness is not a waste-basket term under which we classify those creatures in whom we see inferiority, but the disease cause of whose condition we cannot see, and about whom we know too little to offer help, or cure, or prevention.

The introduction of the study of psychopathy seems inevitable and imperative. Fifteen years ago at the most, the diagnosis of feeble-mindedness was entirely a matter of

experiential procedure. The only standardization in use was the conjumbling of questions on application blanks, as used for admission to institutions for the feeble-minded, and these varied according to the institution superintendent. The introduction of mental-age findings brought to light a great deal of unsuspected data. The moron is almost entirely a revelation of test findings. He lacks the numerous physical stigmata so generally used to identify the imbecile. Even to-day it is almost impossible to get many courts to probate a feeble-minded girl of the eight- or nine-year mental level, *if* she is attractive or pretty. Other social problems have for the first time been definitely and *statistically* connected with the problem of intelligence level. Intelligence diagnosis itself from a perfunctory haphazard side-issue of the physician's work has developed into a separate occupation, although not always fully professionalized.

The study of psychopathy needs similar emancipation and standardization, especially in its relation to the diagnostic handling of children and adolescents. The psychiatrist, the medical specialist in this field, has usually devoted his time largely to the handling and study of adults. His training seldom involves sufficient technical training in the handling and understanding of even normal children and their problems to give him a definite basis for the differentiation of the abnormal child, unless it is one whose deviation is extreme. Again, psychiatric methods lack the refinement of standardization that would enable a member of the profession to detect the first shadowy signs of disturbances and related intelligence level unless he adapts some of the accepted psychological procedures. Even then, because he has usually lacked intensive training in accuracy of technique with such materials, the results are apt to be far more highly variable than when used by a psychologist. There is a general tendency to regard the

whole problem of the disturbed mind, the psychopath, the psychotic, and the neuropsychotic as belonging for solution and handling to the psychiatrist and the alienist only. The same attitude held about the feeble-minded some twenty years ago, and most states still have a remnant of this sovereignty in the law that specifies certification of condition by physicians for admission to state institutions for the feeble-minded, although the psychologist has already received some recognition in this matter. The question of the limitation of the study of the individual with a disturbance of intelligence will undoubtedly pass in the same way, provided psychology can make good and offer some help to the solution of the problem. Most of the contentions as to the relative limitation of the prerogatives and lines of research of medicine and psychology seem to the writer to be wars waged over the obvious. There is sufficient work for all interested in the study of human behavior, no matter what angle appeals most. Moreover, the problems of the disturbed, diseased, erratic, or psychopathic mind are the same for the psychiatrist and the psychologist, the lawyer and the layman, the educator and the social worker. Facts arrived at by one group are facts for all the other groups. If generalizations reached by one group are true, they will fit into similar problems met by the rest. There is no dividing line between what is essentially a problem for any group and what another group may find worth studying. Clinical psychology has contributed sufficiently to the impetus of social work and the solution of social problems to dare extend its researches into new fields. The general development of experimental laboratories, the coöperative interest of educational psychology, the statistical training so generally available for psychological students induce and encourage such development. Far more important, however, is the fact that clinical psychologists have reached that point of critical dissatisfaction with their own work which

means they are ready for the consideration of new aspects of the problem.

Let us briefly reëxamine the studies summarized in Chapter VIII. The criticisms they evoke are explainable when one accepts the concept of psychopathy and admits the possibility that disturbances of intelligence functioning may influence test results that were originally meant to study intelligence level only. The high percentages of feeble-minded found by Haines, Goddard, and Pintner necessarily include all individuals in whom psychopathy had radically lowered the mental level of the individual. So far as present indications go there is a possibility that such lowering of the intelligence level is by no means permanent, although no data are available which give any definite answer to the question of the percentage who regain intelligence level when the cause of instability is removed or alleviated. Neither do we know whether such recovery is only partial or relatively complete in the majority of cases. Following psychopathic children for even a year will demonstrate to any psychologist that radical changes do occur. One item which seems highly significant in this connection is the report of Adler at the Prison Congress in 1920. He found that prisoners in the reformatories and penitentiaries of Illinois uniformly gave higher testing ratings than were found for similar groups of men in the army. To the writer it seems most probable that the seeming discrepancy may be entirely accounted for by the introduction of the factor of minor psychopathies. The actually insane individuals were properly identified and diagnosed in Adler's study, but their number is relatively insignificant as compared with the number of more or less disturbed individuals sentenced to such institutions, who would successfully pass the psychiatric tests. Regular regime of institution living with the enforcement of proper hours of rest, and work, and recreation cannot but have a definite restorative effect upon

these cases. On the other hand, the army groups had, in all probability, a similar percentage of such potential deviates. The strain of leaving home, adapting to rough group conditions, the anticipation of a prolonged period of such living with the prospect of injury or danger ahead would undoubtedly affect the same type of individual in just the reverse fashion. Moreover, the army tests were usually made at about the time of the maximum disturbance, before the individual had time to adjust to the new conditions, whereas in the Illinois study the reverse is true. The discrepancy of the two sets of data may well represent the difference between psychopathic individuals under corrective conditions, stabilizing back into their maximal ability, and similar individuals who by force of adverse environmental conditions are depressed to minimal ability.

The low percentage of feeble-minded found by Bronner is in all probability due to the fact that her group was a selected group. Children who were doing well according to the estimate of responsible members of their environment were not examined. This would eliminate a goodly number of those of inferior level who were functioning normally, or nearly so, at that level. Those left for examination would include a resultantly higher percentage of the more radically psychopathic individuals. This would throw the emphasis of test findings upon psychopathy. There would be more of those who are "different," and this in turn may incidentally throw some light upon the overindividualization of cases which characterizes the work of both Bronner and Healy. Bluemel's difficulty of personal evaluation of his cases would be simplified by a consideration of instability or psychopathy. Williams' study would find the nervous and insane child a definite part of the problem confronting him psychologically, if psychopathy were evaluated in relation to other intelligence aspects. The 42 per cent of his cases that show indications of extreme ner-

vousness would probably yield many other definite and objective symptoms of their nervousness if their examinations were qualitatively analyzed for such irregularities. As it is, the diagnosis of nervousness was that of the physician and was not related to test findings. That this is not a special problem of a small part of his group is indicated by the fact that he reports that cases which "border on insanity" are found at all levels of intelligence.

The problems presented by Kuhlmann's report of children who make normal progress year by year although far below normal level when first studied, and by Bernstein's ability to train institutional cases for successful community living may both be aspects of the situation underlying Adler's data. It is highly probable that it is the child of psychopathic tendencies who makes up lost ground when proper living conditions are assured. This would explain Kuhlmann's cases, and it may explain a number of Bernstein's, although he is, in all likelihood, dealing, not only with that type, but also with the individual who is so thoroughly stable that once trained into right habits he persists in them because of his absolute stability or because he lacks sufficient intelligence to rationally determine other modes of behavior.

The defective delinquent is undoubtedly a psychopath. The description of him is a description of traits of abnormal functioning in a mind of fairly high intelligence level. The term defective delinquent is actually a stopgap which recognizes the necessity of some other factor than intelligence defect as the cause of the behavior of the group so classified. The term is inadequate and not actually necessary if we recognize the probability of disturbance of intelligence functioning without the necessity for accompanying lowered level to the point of so-called feeble-mindedness. In the same way, the generalized term mental defect is no longer of usage with this concept. One need not determine

absolutely whether an individual is feeble-minded or whether what is wrong with him is some other thing more vague and to be more safely classified under the term mental defect. Our two-fold concept gives us the right to a two-fold diagnosis, one of level and one of function. The static idea of mental defect may be left for the somatologist.

These are but a few of the problems upon which the concept of mental level and mental function seems to throw a new light. From the standpoint of our theory of man as a functioning and behaving organism we must recognize the possibility of psychopathy. If an individual's responses are modified, in varying degree, of course, by all in his environment which he senses through the modality of any sense organ, then how can we avoid accepting the possibility of wrong action and abnormal behavior, even in a practically normal organism, if the proportion of wrong stimuli in the environment becomes too great? The more normal an organism, that is, the stronger its tendencies to safe and normal response, the longer it would inhibit the tendencies to any abnormality of response, but with continued stress such wrong reactions are merely a matter of time. The probabilities are that such a situation as this hypothecates would lead in most cases to a nerve exhaustion or "mental breakdown." The disturbance that can be eliminated by analysis is frequently of this type. Is it possible to detect such conditions by psychological examinations? Undoubtedly so, but not by any rapid-fire use of a single test.

Again—the acceptance of a study of intelligence function seems to save us any need for attempting so-called character and personality analyses. It takes care of these. What is character? It is the sum-total of an individual's ideas, memories, and imaginings, especially as they relate to his assimilation of the behavior code of the group with which he lives (this is merely an aspect of his intelligence level)

plus the estimation of the reliability of his acting in accord with this knowledge. This latter factor is a composite of his functional stability and his past experiences, that is, habits of action. Frankly, there seems to be nothing more to it. At a certain moment a certain decision must be made. The past experience of the individual arouses certain tendencies to certain types of behavior. Every factor in the environment which is old and familiar reënforces the tendency to earlier forms of action, or reaction. Associatively, the whole system is influenced in its pleasure-pain relation to the contemplated act. All that is different in the situation tends to inhibit the act, and this, in turn, is accentuated by all the earlier conditioned associations which, with their feeling tone, tend to inhibit the act. The result? Action or behavior predetermined by that group of reaction habits which is the stronger. The more stable the individual, the more predictable is such behavior, the more trustworthy any estimate of the individual's character. The more psychopathic the individual, the less reliable is any such prediction.

And personality, what is it? From the standpoint of the scientific study of an individual it does not seem to be the awesome, mysterious, unapproachable essence which many see in it. We must grant that fundamentally all individuals are the same. Belonging to the human group, our perspective is so foreshortened that we usually overlook this, although all of our group activities are based upon the subconscious utilization of this very fact. What is personality then? It is not the basal attributes of an individual, but the superimposed accidents of his individual experiences, opportunities, and handicaps. It is the things wherein he is he and not Smith, Jones, or Brown. Fundamentally, these personal attributes are habits of reaction, functional types of reacting. As such they are a composite of old experiences, hurts, fears, happinesses, successes.

They are not merely intelligence reactions, if one means by that products of the so-called conscious nervous system. Experiences make their mark upon the whole organism. The digestive system, the circulatory system, the ductless glands all feel the effect of each act of our everyday life. They feel it as it *changes* or *does not change* their mode of response. But, once such connections are made, they persist. The individual whose whole system has responded to an injury by the realization of a sense of inferiority, differs so long as that feeling lasts. Striving, emulation, boasting, avarice, lying, melancholia, chronic irritability, are but a few of the attributes which develop out of such a feeling.[4] The psychoanalytic world has been emphasizing such transformation of the personality for nearly twenty years. Therefore, until we have carefully explored these newly opened provinces, until we know the limitations of the explanations which psychoanalysis can give, until some definite demonstration of the effect of glandular changes upon the individual's behavior has been worked out, until toxicity is eliminated as the probable cause of many things all the way from grouches to overexhilaration, why need we bring into the discussion a something these factors may explain? Character and personality, per se, are not subject to tests. An ethical test given under controlled laboratory conditions becomes a test of intellectual comprehension and of appreciation of the theoretically approved reaction. In real life the situations which reveal character and personality are not so-controlled. They have stressful emotional concomitants. They are crises, because the conditions are not controlled. The individual's reaction to such situations becomes a matter of his intelligence, plus his experiences heretofore, plus his functional tendencies. The emotional

[4] Alfred Adler, *The Neurotic Constitution: Outlines of a Comparative Individualistic Psychology and Psychotherapy*, translated by Bernard Glueck and John E. Lind.

factors of his functioning are a vital part in the determination of his line of behavior. A controlled laboratory test has no way of awaking emotions in such fashion; consequently we cannot fully measure character by direct ethical tests. It seems wise consequently to devote one's self to the study of those aspects of human nature that are capable of being studied in a scientific fashion. Personality yields before a functional analysis of the individual's behavior.

The manifold aspects of probable research into the subject of psychopathy cannot easily be formulated until experience has vindicated or disproven the fundamental aspects of the thing. One need not feel, however, that first attempts must be left until a complete statistical formulation of it has been made. Such an analysis is, in all probability, beyond the ability of any one individual or clinic group of individuals. The farther one goes into the problem, the greater become its ramifications and the more profound its significance. At least, such has been the experience of the writer. Some will immediately raise the question as to how we mean to relate the intelligence or psychological symptoms of such disturbance to the behavior disturbances which make social problems. Undoubtedly, the study of groups of social deviates is the best method of ascertaining just the extent to which they are intelligence deviates also. Fortunately, we have some partially acceptable norms for control purposes, but there is a wider relation of the two fields which needs a little more emphasis. The delinquent, according to the social code, is an individual whose habit of response is unpredictable. He disregards threatened danger to himself, is self-centered, indulges extreme desires, feelings, and emotions. This behavior is usually regarded as a something entirely different from the picture of behavior granted by a psychological examination. It is not necessarily so. The psychiatrist has for years de-

pended upon even a personally evaluated estimate of a patient's behavior as the basis for mental diagnosis. The psychologist does not desire to do that but has a definite right to analyze behavior for its erratic, peculiar, unforeseen qualities, and then attempt an analytic relation of these to his laboratory findings. We know from experience that social and economic failure may be predicted with absolute certainty for adults with a level below seven years mentally. The probability of such failure falls as mental age rises. We know that educational success is in the same way partially related to intelligence endowment. Is functional disturbance of behavior as definitely related to such disturbance of intelligence functioning as we can experimentally determine? As it happens, there have already been a number of minor contributions on this subject, so that we need not leave the question unanswered, although all methods are still in the experimental stage.

CHAPTER X

METHODS OF DETERMINING PSYCHOPATHY

We cannot hope to accomplish the determination of a second aspect of an individual's intelligence without some rather definite revisions and extensions of our present methods for determining intelligence level only. The first need is for a general refinement of procedure. If one errs in the presentation of a certain test in the giving of a Stanford-Binet, the result is a mental age that is either two months too high or the same amount too low. On the higher levels the error increases proportionately, although the clinical significance is probably less, for there is less chance of the individual who does such tests being rated as feeble-minded. This holds by the mere fact that he is being tried on such superior-level tests. If one gets the presentation wrong on two tests the error of rating of the individual is twice as great. More tests increase the error proportionately. But the fact remains that the examiner ends with a certain form of work completed which gives him a mental age. This may be a wrong rating of the individual and may score him one or two or three years from what he should be, but the examiner may still rest content in his ignorance of this fact for he has achieved a mental age. The diagnosis of psychopathy is entirely otherwise. The study of deviations means first of all absolute accuracy of the measurements made, else one has nothing stable from which to measure the deviation. Careless examining used for the twofold purpose of mental age and mental function determination is not merely twice as bad as when used for mental-age diagnosis, it becomes a fraudulent imposition.

Nor is the matter of accuracy in applying tests an irrelevant matter. Recently an instructor in a large university gave some demonstration tests using the Stanford. There was no effort made to use the prescribed forms of aufgabe or directions. The vocabulary test was successfully passed by the child who could give intelligent associative responses to the question, "What does orange make you think of?" This is a definite change of test difficulty from the correct presentation of the question, "What is an orange?" Yet this instructor, erring to a similar degree on tests throughout the whole performance, was training a group of graduate students who were within a year of going out to try the practical application of what they learned. The illustration is not extreme nor isolated.

Such work would be a most improper basis for functional analysis. The study of psychopathy necessitates absolute precision in the application of the tests, in the use of test materials, and in the recording of test results. Nor is this all. Every detail of the individual's behavior under the test conditions is significant and should be watched and impersonally recorded. Indeed, the study of the points of individual difference in a subject is from all angles one of omnivorous attention to detail. But even with such attention and precision we must insist upon what has usually been thought of as a matter of individual desire and determination of method. The tests used must be multiform. No one test or series will give enough indications of disturbance of intelligence to enable one to make a secure diagnosis. The attitude during the examination must also be definite. There must be more emphasis upon how a child does what he does and less upon the achievement of an end result or rating. In other words, there must be more data gathered during the examination which will yield us information as to the quality of the child's ability. The simple measure of how much he accomplishes, the measure of the quantity

of his performance, will not yield much information for the study of function.

Perhaps it is unnecessary to point out some of the results of this change of attitude. Diagnostic work will be slower, longer periods of observation will be needed. The questions that the observation of different attributes raises will demand wider coöperation with other allied professional fields for their solution and more need for help from social agencies for corrections attempted. All of this looks like a serious handicap from the standpoint of American hurry and the continual emphasis upon cost as the important factor. As a matter of fact, the result will be more than worth while. Even though nothing more definite were learned about the child (and there is no reason for such an assumption), the emphasis is merely placed upon the kind of work that is ethically demanded of any psychological clinic and can mean but one thing—better trained workers or wider training of the workers employed at present.

The concept of the psychopathic child is not new. It is merely the attempt to formulate exact psychological measurements for his peculiar attributes that is, of necessity, a recent development out of modern methods. Perhaps the best method by which to become more definitely acquainted with the problem that we wish to handle in our attempts to analyze individual deviations through formal tests is to form a general concept of a psychopathic child from out our various discussions. To begin with, he is usually identified by some much milder and less foreign sounding term. Nervous, unstable, different, erratic, peculiar, bright but queer, all right in school but different from other children, these are some of the terms which have been used to describe him. For several reasons any or all of these symptoms are not quite the same in children as in adults. Those experiences, diseases, and hereditary pre-

dispositions that will later, if uncorrected, develop into the acute mental disease or other extreme handicap of the adult's life have, in the child, a much more vague, elusive quality. One deals not so frequently with a mania or a psychosis but with the *shadow* of it. The definiteness of outline, exaggerated symptoms, acutely disturbed behavior are blurred into a misty group of symptoms, and, only too often, the intelligently anxious parent, worried thereby, is laughed out of his worry and told that the child will outgrow it. Such a statement is merely a remnant of the general attitude regarding the details of childhood some forty or fifty years ago. The mistake lies in measuring the significance of such symptoms by comparing them with adult behavior instead of studying them as deviations from the behavior of children in general. It is this difference of symptoms that still makes a definite increase in the difficulty of studying the child in diagnostic fashion. The adult has achieved his final maturity physically and mentally. He has a more or less definite and already determined endowment. We can study him in the light of this. The child is immature. Many of his attributes are still mere potentialities which only time will reveal. We have to deal with an organism which cannot even stop to acquaint us with its attributes. It struggles under the power of a force which changes even its very desires before they are known or fully expressed. Growth in body and intelligence, with a constantly changing attitude towards himself and the world, absorbs the time and energy of the child. He cannot help us, so our observations must be made under a constant handicap. Naturally, there are many variations, vexatious and troublesome, incidental to the mere process of growth. Some of these will reach their own solution with growth changes. It is from such symptoms that the tradition of outgrowing all difficulties arose. But it is problematical whether even such disturbances would not yield more

readily, to the individual's greater efficiency and comfort, if expert help were given at the right time.

Aside from these incidental disturbances, the symptoms of disturbance of the nervous system in children are many. The whole group of direct physical symptoms seems, at first glance, to bear no relation to the psychologist's problem, but this discrete character disappears when they are studied more closely. Facial and body twitchings, spasmodic movements, speech defects, sleeplessness, night terrors, enuresis, lack of appetite, apathy, poor carriage, poor motor control, headaches seem to be definitely signs of bodily need or a disturbance of the nervous system which means tonic, rest, diet, any or all of the possible medical measures for correction. The most difficult cases, however, are those in which the symptoms do not yield to such treatment but prove to have a "psychic" origin and may be readily eliminated by a common sense usage of psychoanalytic methods. Beyond this group of symptoms lies the true province of the psychologist as he is called upon to handle the study (and cure!) of the nervous or truly psychopathic child. The symptoms mentioned above are symptoms of a psychopathic tendency when their "psychic," or mental, origin is determined. In other cases we must at present rest content with describing them as symptoms of a neuropathic nature, although it is rather doubtful whether they ever occur independent of some signs of behavior disturbance. The psychopathic child may have many minor manifestations of his condition or some one or two more serious indications, or he may combine all sorts of signs.

The psychopath is a psychopath simply because his intelligence functions wrongly. The only way such wrong function can show is in his behavior, that is, in both what he does and what he says. It is the observation of these as symptoms that enables us to classify him tentatively as a deviate. The intelligence which shows as present in, or

absent from, his behavior is not a measure of psychopathy but of his intelligence level. The psychopath may be a feeble-minded individual of moron, imbecile, or idiot level. He may be possessed of the average amount of intelligence or he may have more than the usual amount of endowment. The only effect it is apt to have upon his psychopathic tendencies is to make them more or less complex. One could not expect well organized delusions in an idiot. His level precludes that. In the same way, extreme anger is more apt to develop some complex behavior results in an intelligent individual, whereas the inferior takes it out in crude violence. In general, psychopaths present a large group of symptoms which are deviations both ways from the normal. They may dislike other children and be consequently solitary or they may hunt other children to tease, torment, and hurt them. In neither instance do they get along well with the group. They may be overalert, hypersensitive, unduly stimulated by all in their environment, or they may be apathetic, lack sensitivity, and present no surface reaction to what goes on. They may be overenergetic, very emotional, tense, easily aroused to extreme pleasure or pain. They may be just as lacking in all these traits. Most of them, when compared with other children of the same mental level, prove to be verbalists. They use language profusely, glibly, superficially. Usually, speaking about a thing is their last resort. They see little, if any, difference between speaking of doing and doing itself. Consequently, they seldom bring their verbal planning to the complete realization of deeds. They have violent loves and hates. They live at one extreme or the other of the emotional plane. Overexhilaration typifies one, chronic depression another, rapid alternation of emotional extremes a third. They have strong likes and dislikes even for food. They develop queer ideas about almost any conceivable object in their environment. They have monotonous plays, habits,

and subjects of conversation. The brighter ones are especially prone to fears.

The behavior of psychopathic children is marked by such symptoms. As a result, it is usually far less predictable than that of the normal child. More supervision is needed, accidents happen more frequently to them, their toys, and their clothes. They do not play contentedly. Other children are not always safe with them. They do not get along well with children of their own age. They like the attention they get by associating with adults, or, in some instances, they seek individuals who are far below them in actual intelligence. In all such cases, and frequently where this symptom is lacking, the social comprehension and the maturity of behavior are far below what one might definitely expect in a child of like age and mental age. The ego is the center of their world long after most children are aware of the need for observing the rights of others and practicing self-restraint. They exhibit all possible oddities of precision, overemphasis of neatness, cleanliness, and exactitude in details. They may be just as appallingly slovenly, careless, and dirty.

The symptoms we have enumerated so far, although having a definite psychological significance, are not anything but the psychological side of general clinic symptoms, most of which must be gathered from the report of those who know the child's daily mode of living and the problems he presents. Is it possible to correlate the presence of such symptoms with laboratory findings in such a way that we can determine the relation, if any, between such habit symptoms and deviations from the average, group reactions on the tests? Theoretically, the two should be found in one and the same child. Are they? Do our tests test the processes that are disturbed in such a way that peculiar behavior results? If they do, what are the test indications of this disturbance? Fortunately, partial answers to

some of these questions are already available. The problem has been approached from a number of viewpoints so that the methods already evolved, although imperfect, are by no means one-sided.

We owe the first work on this aspect of the problem to the same man of vision from whom came the idea of measuring intelligence level, that is, Binet. He not only realized the problem which he had been working on in his study of the inferiors in level but undoubtedly recognized the limitations of the methods applied in studying it. The relativity of present mental age to future possibilities of development, that is, to prognosis, the necessity for proper analysis of findings, and the whole problem of the first attempt to differentiate the mentally disturbed from the mentally inferior were a part of his interest and research. There is no doubt but that it was his own concrete experience which was largely responsible for the insight that enabled him to see the necessity for a study of the quality of an individual's behavior on the test, as well as to ascertain his mental age. Stern emphatically urged the need for refinements of observation that would enable one to analyze the child's behavior so as to ascertain the "qualitative coloring of his intelligence."

It was five or six years, however, before anything of a very definite nature was attempted in this country. Then, most of the work done was on the basis of tests that have since been discarded so that we, to-day, have but the statistical beginnings of norms for qualitative analysis. However, these definitely resolve themselves into a certain group of points which have received confirmation from more than one practical source.

1. The amount of variability on the Stanford-Binet as measured by the number of years above the basal year in which a child scores successes. For example, if a child has a basal year of 8 and succeeds in some tests in 9 and 10

and does one other test in the 14-year group, his *range* is 14 years minus 8 or 6. The child who does no tests above his basal age is so rare that he may rest unconsidered. The tests on the Stanford are grouped as the successes of the great majority of children studied place them. A child whose mental development has been a little more rapid than that of the group in some ways will be able to do tests above the general group level in that respect. The more unusual, the more in advance of the group an individual's development, the higher will be his successes in certain lines. Roughly, this is measured by range of successes above the basal year.

This aspect of test differentiation was one of the earliest pointed out. The first indications of this scattering were those reported by Goddard.[1] He found that the inmates of a hospital for the insane had successes scattering through a number of years above their basal year, whereas "the normal child or the feeble-minded reaches his level by answering all the questions as they come, up to almost his final stopping place." Doll analyzed the scattering of normal and defective children on the Goddard revision of the Binet.[2] Since the arrangement of the scale was in itself imperfect, he overcame this difficulty by rearranging the tests in their order of relative difficulty. Following this with a statistical analysis, he finds the scattering for the median-age groups of normal and feeble-minded children indicated in the table on page 172.

Very little work has been done to follow up this method of determining the probable limits of variability of children of different ages. Terman[3] has reported the percentage

1 Henry H. Goddard, "The Problem of the Psychopathic Child," *American Journal of Insanity*, April, 1921, pp. 511-516.

2 Edgar A. Doll, "'Scattering' in the Binet-Simon Tests," *Training School Bulletin*, October, 1919, pp. 96-103.

3 Lewis M. Terman, *The Stanford Revision and Extension of the Binet-Simon Scale for Measuring Intelligence.*

SCATTERING FOR THE MEDIAN-AGE GROUPS

	Mental Age, Basal	Years Range above Basal	Basal Age and Points	Actual Mental Age
Normal.....	4	3	4^7	5.4
Feeble-Minded....	4	3	4^7	5.4
Normal.....	6	1	6^3	6.6
Feeble-Minded....	4	4	4^{12}	6.4
Normal.....	6	2	6^6	7.2
Feeble-Minded....	6	2	6^6	7.2
Normal.....	7	3	7^7	8.4
Feeble-Minded....	7	3	7^6	8.2
Normal.....	8	3	8^7	9.4
Feeble-Minded....	7	4	7^{11}	9.2
Normal.....	9	3	9^7	10.4
Feeble-Minded....	8	4	8^{11}	10.2

of successes and failures of children of different ages on each individual test in his revision of the scale. From this it is possible to construct a table which gives the greatest probable range of success. This is as follows:

RANGE OF SUCCESS IN THE STANFORD REVISION

Age	Number of Children	Range of Successes			
		Assumed Basal	Lowest Failures	Highest Successes	Range Possible Highest
3.....	10	2?	3	5	3
4.....	51	2?	3	6	4
5.....	147	2?	3	7	5
6.....	165	3	4	8	5
7.....	160	4	5	9	5
8.....	187	5	6	12	7
9.....	196	6	7	12	6
10.....	175	6	7	14	8
11.....	159	7	8	16	9
12.....	143	8	9	18	10
13.....	137	8	9	18	10
14.....	106	9	10	18	9

From this we can get no direct statement of the probable range of successes of any one individual. All we know is the maximal range of the group to which he belongs. For

instance, since the total range of the whole unselected 3-year-level group is only 2 years above the age 3, or 3 years above an assumed basal of 2, the individual must vary within these limits. His range cannot be more. The increasing range from year group to year group seems highly significant. Older children gain in ability to do the tests at the higher levels, *but* at each age a certain percentage tends to remain unable to accomplish tests at lower age levels. We must remember that the children in these groups were unselected, so that the feeble-minded and the psychopathic are probably represented as well as normal individuals. Analysis of Terman's own tables soon shows that it is a small percentage of the group at any one age which causes the wide range of variability. Let us take age 8 for instance. This is the first age at which there is a possibility of more than five years range above basal. The tables show that with the exception of the ball-and-field problem in the twelfth year no 8-year-old scores a success anywhere outside the ages 6 to 10. This means that, since only 17 per cent succeed on the ball-and-field problem, 83 per cent of the group cannot have over a five-year range.

In the same way, we can analyze the 9-year group down to at least 71 per cent who range only through the 4 years of from 7 to 10. Since 25 per cent are reported as scoring successfully on the ball and field in the twelfth year and 4 per cent on that level vocabulary, not more than 29 per cent in all score above the 10-year level.

The 10-year level group contains 4 per cent who fail to pass one test in the 7-year level and not more than 2 per cent who pass the vocabulary test in the fourteenth year. Consequently, at least 96 per cent of the 10-year-olds have a range 5 years or less.

With the groups above this level the percentages are much more variable, and it is impossible because of such conflict readily to estimate probable variability. For

instance, the 14-year-old group includes 9 per cent who fail a test at the 10-year level. Hence, 91 per cent can have a possible range of only 12 to 18 years, or 6 years. Then of the *whole* group 30 per cent succeed in one superior adult test, 11 per cent in another, 25 per cent in another. If these are all different children, 66 per cent of all have a range of 6 years. But it is probable that some of these may overlap, or that some of our 9 per cent who fail in 10 may succeed here. The number of factors becomes too great to handle as a matter of estimated probabilities. Data by mental age are presented for these ages, but as the mental-age groups are delinquents or unemployed they give no *normal* basis for comparison with other groups.

The whole matter is tentative, but, nevertheless, the fact that from data not prepared for that purpose we can analyze out the variability of eight out of the twelve age groups as being not over 5 years, seems to corroborate Doll's work so definitely that we may tentatively try out the presence of more than 4 years of variability above the basal as a definite indication of instability or variability which is more than that of the group as an average. The use of over four years as a criterion seems wise, for it safeguards analytic inspection of the 5-year range group who may border on the zone of abnormal variability.

Jones reports from a comparative study of very bright and feeble-minded children that the feeble-minded individuals scatter more, but he does not publish details, so that we have no definite aid on this point.[4] Wells also finds marked scattering among the insane, and much more marked indications in general paralysis and dementia præcox than in the manic-depressive groups.[5] He reports

[4] Carroll T. Jones, "Very Bright and Feeble-Minded Children: the Study of Qualitative Differences," *Training School Bulletin*, December, 1919—February, 1920.

[5] F. L. Wells and C. M. Kelley, "Intelligence and Psychosis," *American Journal of Insanity*, July, 1920, pp. 17-45.

that, "various tests, however, do not have the same difficulty for the psychotic, as for the normal person of a given age." However, he gives no year measure of this tendency.

2. On the actual qualitative analysis of "scattering" or test variability we have much more data. Binet gave us the first facts for formulating this point of differentiation. When he compared the general paralytic with the imbecile of similar level, he found that the general paralytic was less consistent, his answers were erratically good or bad for his mental level. He failed in an "unjustifiable" manner. Further analysis revealed errors of all sorts which make one believe that the dement has actually lost his ability to comprehend more difficult demands upon his intelligence. Still finer analysis leads to the conclusion that the whole problem is one of functional disability which allows *sporadic* test indications of former higher levels of ability. He notes especially loss of memory for content of things read or heard, delay in reaction time, delay in initial comprehension of a task, errors in using information which they have.

Since Binet's time a good bit of work has been done that indicates the validity of his attempts. Wells finds a marked tendency for psychotic individuals to fail below their actual mental age on the serial arrangement of weights, rhymes, enclosed boxes, while "the vocabulary test appears least affected of all functions in the scale. Superior adult ability in vocabulary is associated with deficiency in remaining aspects of intelligence down to the upper limits of feeble-mindedness."[6] Formal memory tests are also passed far above actual level. The nine-year tests, except change making, the ten-year absurdities, reading, design, and digits are never passed save by individuals having a mental age up to their level. Tests that are never lapsed below mental age are the eight-year comprehension, and the stamp values,

[6] *Ibid.*, p. 20.

whereas making change, abstract words, comprehension at the ten-year level, and dissected sentences at the twelve-year level are seldom failed.

Jones reports that bright children surpass feeble-minded of the same level in immediate memory, ability to attend, to learn, and to form difficult associations. No definite test relations are presented. Pressey finds that, for the same mental age, alcoholics have greater ability than feeble-minded in comprehension of questions, recognition of absurdities, dissected sentences, and definitions of abstract terms.[7] Psychotics are poorer than feeble-minded in sixty words in three minutes, construction of a sentence with three words, drawing design, and also somewhat poorer in comparing differences. They are definitely better than the feeble-minded in the definition of abstract terms. They vary in almost all ways from normal individuals. Later work shows that the definitions of concrete and abstract terms, comprehension of absurdities, dissected sentences, and drawing the design are the most highly differential tests. Curtis not only reports similar findings but has made a qualitative analysis of some individual tests which shows that the insane have less memory ability as this is indicated in the reproduction of drawings and of selections read than have the feeble-minded or normal, but "there is no evidence that the insane give responses in the memory span for digits or sentences which are markedly different from those given by normal persons of the same mental and chronological age."[8] Doll finds tests which "put a pre-

[7] S. L. Pressey, "Distinctive Features in Psychological Test Measurements Made Upon Dementia Præcox and Chronic Alcoholic Patients," *Journal of Abnormal Psychology*, 1917, pp. 130-139; also Pressey and Luella Cole, "Irregularity in a Psychological Examination as a Measure of Mental Deterioration," *Journal of Abnormal Psychology*, 1918, pp. 285-294.

[8] J. N. Curtis, "Point Scale Examinations on the High-Grade Feeble-Minded and the Insane," *Journal of Abnormal Psychology*, 1918, pp. 97-118.

mium on memory processes or experience'' are easy for the feeble-minded while those that involve adaptation and abstract judgments are relatively hard.[9]

This is about the total of our information on the significance of individual tests. Unsatisfactory though it may be, it proves the possibility of qualitatively sorting out individuals further than our mental-age differentiations by attention to the tests that determine that mental age. Perhaps the only points on which there are sufficient data to give us any generalization are that psychotics are relatively good in rote memory, comprehension, absurdities (?), and use of abstract terms, whereas they are definitely poor in memorial content, as on reading reports and in reproducing designs, and are relatively poor in rhymes, reaction time and 60 words, the weights, constructing sentences from 3 words, solving enclosed boxes.

3. The quality of the individual response on the Stanford is also significant. This is true not only for tests that are successfully passed but is even more spectacularly found in the tests failed. Indeed, the failure may be due to the individuality of the response. There is a different quality in the verbal replies of a dement from that found in the replies of an imbecile, asserts Binet. The dement has a certain ''residue,'' or sign of his earlier ability. One cannot improve upon Binet's facile description of the experience which the psychoclinician receives from studying such individuals. Such residues ''consist in the shade of expression and gesture, the form of language, the turn of a phrase, the choice of words which are in harmony with a rather high intelligence which to-day is lost. As a result of this we, the observers, meet with a host of slight perceptions more or less conscious, often badly confused, which reveal the contrast between what the dement actually is and what he once was.'' Such indications are monotonously lacking

[9] Doll, *loc. cit.*

in the imbecile. Binet illustrates this thesis with a series of observations upon the retention of language forms, entirely unexpected for the general intelligence level found. For instance, he reports that a four-year-level dement, speaking of her past, said, "I was very beautiful, I *assure* you." He also reports diffuse, incongruous answers, or irrelevant ramblings added to a correct answer.

Foster reports that "in certain types of insanity there are significant responses not indicated in the score, such as extreme size and irrelevant detail in the case of the memory drawings, and numerous errors and additions in the reports of the paragraph selections."[10] The case with a mental age of 11.5 or over on the Point Scale may be expected to have correct drawings if not-insane, or if testing feeble-minded. The drawings are elaborated in dementia-præcox cases, and in the syphilitic and paranoid groups, but are sketchy in the manic-depressive and the alcoholic groups. The general tendency in a psychotic patient is to enlarge the size of the drawing in the reproduction. The syphilitic psychoses average 5.3 cm. as contrasted with 3.8 cm. for average size in feeble-minded and not-insane subjects. The other psychoses in no instance average over 4.4 cm. She also reports definite differences in the report of the content of a paragraph read. There are no additional irrelevant details in the report of feeble-minded and non-insane individuals, but there are a few in all psychoses studied and many in the syphilitic psychoses, who, in proportion to the others, give the fewest number of correct details. Wells adds to our information on this attribute of insane cases. He reports that the scale gives scope for perseveration through irrelevant continuation of a satisfactory response to questions where it will not apply correctly; perverted responses of dementia præcox in interpreting the pictures; complex

[10] Josephine C. Foster, "Significant Responses in Certain Memory Tests," *Journal of Applied Psychology*, June-September, 1920.

indications in vocabulary tests, especially the tendency to self-destruction; stereotyped replies; ability to react in a specialized form but not according to general test requirements, as, for instance, ability to write responses but inability to talk, which is a special indication of non-adaptation, not of lack of intelligence. Although there is practically no other mention of this feature in the current literature on tests, yet the significance of it is easily recognized. The unusual usage of a word that indicates superior intelligence is often the only indication of this type found. In other individuals the tendency to diffuse, elaborated rambling, half-coherent replies is more marked. Sometimes it is only the fact that an examination has taken such a long time that makes one realize how many such minor digressions have been present. In other cases the answers are startling by their peculiarity and yet not actually witty nor wise. They resemble more a thing that has been taught a clever parrot and are as incongruous in the light of the rest of the examination. The use of nonsense syllables or automatic perseverative phrases in the 60 words in 3 minutes, the personal application of all conversation to self as its subject, the interpretation of definitions, sentences, fables, absurdities, and many other tests from the standpoint of the "I," unexpected delay or acceleration in the general type of response, monosyllabic answers where more is necessitated by the character of the question, all are unusual and indicative of the need for further research into the reason for their presence.

Two other indications of instability or individual variability may be determined from the analysis of the findings on the Kent-Rosanoff association series. Since this series is less well-known than the Stanford, a brief description is necessary. The association test is a list of 100 words, modified from several of those which have been definitely used for analytic work here and abroad. This list of 100 words

is given to an individual with directions somewhat similar to the following (which is the writer's standardization for verbatim use with children):

> Now I am going to say some words to you. I shall say them one at a time. Each time that I say a word I want you to answer, just as quickly as you can, with the first word that my word makes you think of. For instance, if I said *candy,* you might say *chocolate,* or *good,* or *eat,* or *buy,* or any one of a great many words. Now any one of these words would be right, for I want to know what you think. Remember, you are to say only one word and say it as quickly as possible. Now what would you say if I said *gun?*

Then, if the trial word brings a response which means that the individual understands the situation, one proceeds to give the regular list. In the Kent-Rosanoff study of this test, 1,000 supposedly normal adults were given the whole series of words. The reactions of the 1,000 individuals to each stimulus word were then studied and arranged in tabular form. For instance, the first word of the list is *table.* The 1,000 responses to this word include the reaction *chair,* given 267 times, *cloth,* given 57, *wood,* given 76, whereas words like *ugly, snow,* and *street* do not appear. One can see that the latter are not indicators of normal associations with the word *table.* In general, the whole tabulation of the responses given by normal individuals is a listing of the majority of responses one would expect from normal individuals, that is, from individuals who do not show any signs of mental disease.

After one has given the test to any individual, it is possible quickly to evaluate his reactions from the tables of the so-called normal reactions. One looks up his reaction to the first word in the table of reactions to that word and gives his reaction the numerical value of the frequency it has in that table. If the word does not appear in the list but some other derivative of the same root does appear, his

reaction is listed as doubtful. If it does not occur in any form, he is given a zero, which means that the reaction is "individual." But comparison does not necessarily stop there. Kent and Rosanoff have found the average distribution of the reaction values given by a number of individuals measured on this test. To this end they group individual reactions, questionable reactions, reactions given by one individual out of a thousand, those given by from 2 to 5 individuals, those of a frequency from 6 to 15, 16 to 100, and those that occur more than 100 times in 1,000. Their norms have been established for 100 college graduates, 100 persons of common school education, and for 78 children of school age. The writer, with the aid of an assistant, Miss Louise Wood, analyzed the frequency tables that Kent and Rosanoff present, in order to establish the same frequency distribution for the 1,000 individuals grouped therein. Of course, in doing this it became necessary to change frequencies of 1 to individual frequencies and to reduce the evaluation of each frequency accordingly. Following are these various frequency distributions:

FREQUENCY OF VALUES OF REACTIONS

	Sex	Number of Cases	Values						
			0	?	1	2-5	6-15	16-100	100 plus
College	M	60	9.2	1.3	5.2	9.7	11.0	27.8	35.5
	F	40	9.5	1.3	3.9	9.8	11.7	28.9	33.4
	Both	100	9.3	1.3	4.7	9.7	11.3	28.2	34.4
Common-School Education	M	50	5.8	1.6	3.6	8.3	10.2	31.6	38.7
	F	50	4.6	1.3	3.3	7.1	9.4	32.0	42.1
	Both	100	5.2	1.4	3.5	7.7	9.8	31.8	40.4
Children under 16	M	33	5.9	0.8	4.2	8.7	10.6	28.5	38.5
	F	45	5.6	1.9	4.6	9.8	11.6	30.1	36.7
	Both	78	5.7	1.4	4.5	9.3	11.2	29.4	37.4
General Average	Both Sexes	1,000	6.8	1.5	4.2	8.7	10.8	30.5	37.5

Two tendencies will be noticed, if one inspects this table carefully. College graduates give fewer common reactions than children. Children give fewer common reactions than adults of common-school education. Although the differences are slight, the relationship seems to be true, for it holds for both sexes in all three groups. The reverse relationship also holds. The college graduate has the greatest number of individual reactions, the children come next, the adults of common-school education have the fewest.

Unfortunately, we do not have variability tables for these data. The original report gives a variability of from no individual reactions to over 30 per cent of individual responses, but this deals only with adults. The writer, having the kindly consent of the authors, carefully investigated the original data, with the hope that a moderate amount of work would make it possible to establish these extremes, but the task would be so voluminous that it seemed inadvisable to attempt it. New data, gathered now, could avail itself of much more exact information regarding the individuals furnishing the special test results. Norms so established, although perhaps not covering so many cases, would be far more valuable for the time spent on them.

Several changes from the procedure of the authors seem to be advisable in using this test. After the series has been given, the custom has been to repeat all stimulus words to which a patient has reacted with a phrase or by silence. This brings in a problem of variability which it is impossible to evaluate from case to case. The phrase or the silence, on the other hand, are just as good indications of an individual's personal variation as a test can show. A correct single-word response on the second or third trial is, instead, a measure of his final, but slow, adaptability. The phrase is an indication of the loss from consciousness of the directions given. The failure to respond at all denotes

either ignorance of the stimulus word or inhibition due to an emotional situation which inhibits response. If one wishes to use the test in definite relation to norms or to analyze the individual himself, it is necessary to account these symptoms as an actual part of the test and not cover them up with second chances. They are far more diagnostic than the words of common significance and high frequency that are apt to replace them. Of course, the repetition of the stimulus word may also be used if there is no desire to keep the individual uncoached for later examinations.

Eastman and Rosanoff later used this same test in a study of 253 backward children, of whom the majority were also delinquents. Of these children, 233 were between 11 and 17 years of age. The only criterion of their selection was "backwardness in studies." The group gave 13.2 per cent individual reactions, 2.2 per cent doubtful reactions, and 84.6 per cent common reactions. (They find that the insane give 26.8 per cent individual reactions, 2.5 per cent doubtful reactions, and 70.7 per cent common reactions.) Abnormal associational tendencies also appear, although not uniformly. There were 382 failures to react, many non-specific responses, and some usage of particles. The accompanying table, giving the distribution for two groups of normal children, 15 in each group, is well worth reproducing.

FREQUENCY OF VALUES

Type of Reactions	Normal Children	
	Under 8 Years	Over 10 Years
Specific	59.7	85.5
Non-Specific	2.9	6.3
Doubtful	3.6	0.8
Individual	22.9	6.6
Failures	10.9	0.8

One may not take this report at its superficial value. There is every possible reason for deferring judgment as

to the actual feeble-mindedness of many of the children examined. They may have been inferior, unstable individuals in whom the instability is evidenced by the delinquency. Woodrow and Lowell have recently made an extensive study of the same problem, but their work is not comparable with the findings reported here.[11] Their tests were given in written form. This brings in another factor. The subject has plenty of time to revise an association and substitute another while beginning to write any one word. Such an opportunity tends to increase the number of common reactions and lower the number of individual responses. A few cases of experimentation with normal adults on any of the association series will definitely prove this to the reader's own satisfaction.

From this summary of the test's attributes it is not hard to see that two general lines of analysis may be easily evaluated. These are both points that reveal deviation from the general type of response and hence may measure psychopathy.

4. The number of individual reactions given by a subject is significant, at least so the present norms would indicate, if the individual is ten years old or more, and if his individual reactions are more than 10 out of 100. The general average for children given in the Kent-Rosanoff standardization is 5.7. Although no upper limit of variability is given, we can easily estimate that this could not be more than approximately twice the average in the great majority of cases. This would give us a range of from none to 11.4 individual reactions. However, in the later study of Eastman and Rosanoff the average is again given as 6.6 for children over 10, so that the indications are that an allowance of 10 individual reactions as the probable limit of normality of variation is at least fair. For the child under

[11] Herbert Woodrow and Francis Lowell, "Children's Association Frequency Tables," Psychological Monographs, 1916, Vol. 22, No. 5.

ten much greater allowance must be made, how much, we cannot determine until we have better norms.

5. Even when we have evaluated the number of individual reactions as significant or non-significant, there is left the same type of problem as when we attempted an evaluation of the quality of individual responses on the Stanford-Binet, the test quality has not been determined. The association test is peculiarly apt in the demonstration of the presence of complexes, no matter what their type. This seems to be no less true with children than the whole analytic school have found for adults, save that the type of indication is often less complex, abstruse or involved. Automatisms, perseverative answers, neologisms, sound reactions, article and numerical responses, phrase interpretations, alliterative reactions without regard to the stimulus word, reactions produced by the simplest stimuli in the environment are all found abundantly in children, as well as other indicators of emotional or nerve disturbance such as giggling, blushing, twitching, misapprehension of the stimulus word, delayed reactions, accelerated superficial reactions, monotony of expression, etc. Of course, one cannot take an examination record in which the examiner has failed to watch for such signs and vindicate these statements, but the symptoms are there for him who seeks them. It is impossible to think of attempting corrective work with its refinement of using clinical indications unless such signs have been watched for and the underlying possibilities determined.

6. Performance tests give another very definite group of individual variations. In general, the use of performance tests has been a development out of the need for a non-verbal test by which foreigners, the mute, and the deaf might more readily and more fairly be rated in a fashion comparable with the mental-age rating of English-speaking individuals to whom the Stanford or a similar scale is given.

The Stanford gives a high rating to the verbalist, a low rating to the child who cannot think in words. The general assumption has been that the performance test is fairer to the non-verbalist than a test in which language plays a large part. Goddard reported the efficacy of the Vineland revision of the Seguin-Norsworthy formboard in estimating intelligence as early as 1912.[12] The value of this board in later work carried out by the Vineland workers at Ellis Island undoubtedly gave Knox the incentive to the development of a whole scale suitable for such work.[13] A later scale evolved by Pintner and Paterson gives much more satisfactory age norms for various tests.[14] Throughout all of this work, however, very little attention has been paid to a problem which is a very real one if a clinician is conscientiously attempting to study individuals from all possible aspects and applies performance tests as well as some one of the other age series. There is, in a great many children, a discrepancy of many years between mental ages on performance tests and mental age on the Stanford, nor is the advantage always in favor of the performance tests as giving the fairer score. Durea finds that delinquent children of 9,- 10,- or 11-year level by the Stanford range in mental ages on performance tests all the way from the 5-year to the superior-adult level.[15] Nor is the scoring consistent from test to test in the performance group. Nor do test results on the performance tests correlate at all highly with the Stanford findings. The two must be measures of different aspects of ability. Since this is so, the perform-

[12] Henry H. Goddard, "The Formboard as a Measure of Intellectual Development in Children," *Training School Bulletin*, Vol. 9, 1912, pp. 49-52.

[13] H. A. Knox, "A Scale Based upon the Work at Ellis Island for Estimating Mental Defect," *Journal of the American Medical Association*, March 7, 1914, pp. 741-747.

[14] Donald G. Paterson and Rudolph Pintner, *A Scale of Performance Tests.*

[15] Mervin A. Durea, "Individual Variability in Test Performance," *Journal of Delinquency*, March, 1922, pp. 86-98.

ance tests give another angle to the understanding of an individual. Theoretically, the child whose development is well rounded and well balanced will probably score at approximately the same level on performance and mental-age tests. There must be definite exceptions of course. A child who tests above his actual chronological age on the Stanford cannot well be expected to measure as high on performance tests in general. Most performance tests are largely dependent upon hand and eye coördination and general muscular control. This is partly a matter of intelligent control but much more largely a matter of physiological development. The bright child will, in all probability, reflect in his performance tests the lack of balance. In the same way, the defective or feeble-minded child whose actual physical development is far in excess of his mental age will have such an excess of muscle, eye, and hand experience that he is apt to score higher on performance than on verbal tests. This is exactly the state of affairs found by Jones when he compares bright and feeble-minded children of the same mental age. Pressey in comparing psychotic and feeble-minded cases finds the feeble-minded are superior. Patients who grade relatively high in mental age "frequently give a performance on these puzzles which can be matched only among the low grades of the feeble-minded."[16]

This gives us so far but little basis for any finality of statement. In general, the factors of age and mental age must be considered in connection with mental age on the performance tests themselves, if we wish to discriminate the low rating of the functionally unstable from the average performance of the normal and the good performance of the feeble-minded child. In all probability an average rating on performance tests that gives a mental age that differs as much as 4 years from the Stanford mental age

[16] S. L. Pressey, *loc. cit.*, p. 11.

needs further analysis, at least to determine the factors back of the variation.

7. Another aspect of the general intelligence of the individual surely deserves consideration in any intensive clinical study of him. Binet gave us our first statement on this aspect of differential diagnosis, too. One may examine an individual and ascertain his intelligence level, his level on performance tests, scrutinize his tendencies on the association test, and yet leave untouched several whole fields of ability or disability. The general information or practical knowledge of an individual is one of these fields. Binet found that the dements were superior to imbeciles of the same mental age in this knowledge which is gained from experience and the everyday surroundings of an individual. A psychiatric examination usually includes a careful estimation of the extent to which an individual retains that information which he should have because of his experience, not in spite of it. Franz has gathered a group of such questions covering the various aspects of orientation towards one's family group, home, current events, practical values, one's environment, work, interests, etc.[17] In general, aside from the attempt to measure deorientation from time and place in psychotic individuals, there have been few statements of what one may expect the ordinary individual to achieve in this respect. Fernald from a comparison of children of various types seen in his outpatient clinic finds that children who are not feeble-minded are usually good in general information, 95 per cent of them passing Franz's series of questions, or an easier series adapted from Binet, whereas only 15 per cent of the feeble-minded children pass the same series.[18] Psychopathic cases

[17] Shepherd I. Franz, *Handbook of Mental Examination Methods*, Nervous and Mental Disease Monograph Series, No. 10.

[18] Walter E. Fernald, "Standardized Fields of Inquiry for Clinical Studies of Borderline Defectives," *Mental Hygiene*, April, 1917, pp. 211-234.

are much better than the feeble-minded, about 75 per cent of them passing the test. They are not, comparatively, as good as not-feeble-minded individuals, who are not psychopathic.

The norms for passing a general information test are more vague than any of our others. An individual who obviously fails in knowledge that he should have because of experiences he admits having fails on this test. One frequently finds here the first indications of deorientation for time or place, or loss of practical judgment. In like manner psychopaths may give verbalistic, superficial responses which actually evade the answer in an ambiguous fashion.

8. In the same way, it is only fair to determine definitely the subject's ability on educational tests. One cannot take a statement of the school grade he has reached as a measure of anything. Children are only too frequently passed on because of age or size. There are plenty of standardized tests of school subjects that will definitely aid in a fair evaluation of the child's ability, although tests for lower grades are still few. Binet found that psychotic individuals had a remnant of academic form but had lost the significant content of the subjects, so that they did poorer work than children of the same mental age, when examined on something else than mere form or such matters as writing, grammatical construction, and rate of reading. The author found that children of the mental ages of 5 to 9 who were definitely feeble-minded could by no means parallel the achievement of normal children of the same level on school subjects.[19] The learning process is definitely slower in the feeble-minded.

Jones found the learning process better in normal chil-

[19] Florence Mateer, "Some Differences between Normals and Defectives not Indicated by Intelligence Tests," *Report* of the American Psychological Association, December, 1916.

dren and grade work achieved more easily. Terman gives definite proof of the relation of normal intelligence to normal school progress.[20] Fernald finds that over 80 per cent of the not-feeble-minded cases he studied succeed in doing as well in school subjects as their actual age would demand. Only 6 per cent of feeble-minded children were doing well in school. It is highly probable that these were younger cases. The psychopathic case almost always succeeds in school, about 20 per cent scoring below the grades they should cover. The test findings on school work are not sufficiently diagnostic to differentiate an individual unless the ratings are compared with mental age and other aspects of his ability, but there is a definite indication that, when mental age is fairly normal and school tests are low, the probabilities are three to one that the case is "psychotic" (as Fernald designates it), or psychopathic rather than normal.

9. The writer knows of no one except Healy who places much importance upon the child's own story as he tells it without interruption or criticism. Yet no one other feature of learning to know an individual holds such possibilities for understanding and giving aid. The mere fact that a child assumes the attitude of a hero, or of one persecuted, or that he laughs off unpleasant happenings, identifies him in a way nothing else can. If he faces the situation normally, that means one thing. If he lies his way out or ignores his share in untoward happenings, we know so much the more what he is. The points he stresses, logical coherence, irrelevance, ambiguity, disproportionate statements, lack of plausibility, wrong sequence, forgetfulness, emotional expression, all tell their tale. The significance is none the less for its being a child's tale. Delusions, myths, ideals, all make themselves known and can be better adjudged because of their story setting. The normal child tells a

20 Lewis M. Terman, *The Measurement of Intelligence.*

plain story, usually a plain statement of facts. Quite often he somewhat slights his responsibility in minor escapades. The feeble-minded child tells less of a story, less well, with the need of more prodding. The psychopath opens to one the doors of a world of bewildering motives, thrills, wrongs, brave deeds.

10. The behavior of an individual while being examined should be closely observed and the details noted before they are forgotten. Experience has shown that the best way is to have a definitely indicated place on the record sheet for such observations. These first-hand impressions, actual behavior data, are highly valuable. They are more impersonal than a parent's report can be, yet they help one understand his report on one hand and actual test findings on the other. Wells emphasizes, through illustrative usage, the importance of such observations.[21] Binet utilizes each and every detail of this type in his case analyses. Psychiatric procedure readily admits the high value of such observations. Distractability, nervousness, wandering around the room, irrelevant acts and remarks, peculiar postures, movements, and gestures, queer facial expressions, laughter, giggling, obstinacy, mutism, temper spells, crying, swearing, banging, throwing, and innumerable other signs are all an aid in the better understanding of the individual. The normal child usually shows but few such peculiarities and they are easily investigated and explained away when they do appear. The feeble-minded child shows peculiarities that signal his stupidity. To the psychopath must be attributed the majority of such unpredictable indications.

The ten aspects for qualitative analysis of an individual which we have outlined are by no means final, exclusive, nor permanent. They are by no means similar in value. The individual's behavior in the clinic, his story, the qualitative

21 Wells and Kelley, *loc. cit.*

analysis of the association reactions and the similar analysis of individual tests on the Stanford appear, *at present,* of most importance to the writer. They all need statistical evaluation and interpretation. It is not the most common variation on tests which is the most significant, but just reverse. *That variability which is least common is the most significant,* for it indicates a variation in an attribute in which the group, as a whole, is more stable. What the qualitative analysis of an individual means as an aid in understanding him only case study can show. The study of intelligence level is a study of our resources, our capital, or our raw material. The study of function is a study of the efficiency of the utilization of these resources. Mental-age ratings give us the presence of, or lack of, intelligence. Functional analyses give us the presence of, or absence of, disturbances of intelligence. Our final psychological estimate of an individual's ability is a summing up of how well he uses the mental equipment he has. Case study, itself, will best illustrate this.

CHAPTER XI

SEREPTA, A PSYCHOPATH

THE telephone rang, and after a moment or two spent in making necessary explanations, the writer promised at least to begin the study of Serepta that afternoon. The child had been brought into town early that morning and had just completed going through a thorough physical examination at one of the diagnostic clinics. The physician found "practically nothing wrong," so wished to have a psychological examination to complete the study, for the reason that she "seemed to be a mental problem." The mother could and would, if necessary, stay until the next day to give whatever time was needed for a full examination.

A few minutes later, having stopped for lunch on the way, Serepta and her mother arrived. The child stumbled up the steps and came into the room rather unwillingly, clinging closely to her mother and looking around suspiciously. The usual remarks about the trip, the day, lunch, and fatigue brought no real trace of friendliness to her face. Instead, she maintained a defensive manner, edging away from the examiner, watching every move, listening intently to every remark made, and adding her own comments, now and then, in the mature fashion of an adult and with every indication that she expected to be treated in adult fashion. Actually, she was a rather tall, fairly well-nourished, scowling child of seven and a half. One could see that there was a possibility that she might, under other conditions, be at least as attractive as the average child, but there was no actual redeeming feature in her appearance at that time. Dark-circled eyes, a pouting mouth,

drooping lips, veiled antagonism in every glance, self-assertion in every move and seeming confidence in her ability to make the mother do as she desired made her an interesting case rather than an interesting child.

The statement of the case. The problem was soon stated. For weeks and months there had been increasing trouble in handling her. She would not go to school, nor would she stay at home. The indecision that would not let her decide either way and be happy led day after day to screaming and crying spells, at home, at school, or on the way to school. She could not sleep at night, even large doses of sedatives having but little effect. The same type of indecision as affected her going to school affected other problems as well. She would want to go somewhere but, when told she might, would cry at the prospect. Crying was not the only result, however, but was usually a mere preliminary to screaming, throwing herself down, kicking, hitting, striking, and fighting. Since she was getting so large and strong, the mother had great difficulty in handling her and feared that she would actually injure herself or some one else. The child seemed to have a definite fear that something would happen. There have been family situations that may have caused this worry or fear.

After being in the laboratory for a few minutes, Serepta definitely stated her desire to go home that afternoon. Since she had slept only under codein the night before and gotten up at four o'clock to make the trip into the clinic; since she had had a most exhausting experience in the medical clinic, resenting with all her might every effort made to examine her, a psychological examination without rest and sleep would have been worse than useless. Telling the mother that they would have to stay until the following day precipitated a "typical" tantrum. She screamed and cried and threw herself against the mother and kicked, yelling

over and over again, "I've got to go home, I've got to go home, I'll die if I don't go home." In an interval when she was getting her breath the fact was forced upon her that the last train had gone (a fact), and she would have to wait until the next day. Her cry immediately changed to "Give me something to eat, I'll die if I don't get something to eat," with more screams and kicks emphasizing the extreme need. A cracker was forthcoming, and the surprise of having her demand so unexpectedly granted brought an immediate cessation of all disturbances. Inside of five minutes, having eaten but half of her cracker, she was playing contentedly with a doll house while the mother gave some more data on her.

Another day of work gave us the following information.

Further complaints. The child is always tired A feeling of nausea comes when she is tired but never causes actual vomiting. Sleep is erratic and poor, codein being necessary, under the doctor's directions. Temperature ranges from 99° to 102° without apparent reason.

At present the child has a spell of stumbling and falling, runs aimlessly into objects in the room and walks poorly. During the last year she developed a hatred of the only sister but is now excessively fond of her. She has more recently gone through the same alternation of attitudes towards the mother. She is afraid to go places alone. She cannot decide the simplest things for herself and is unhappy when a decision is made.

Although she is not quite 7 years and 6 months old, Serepta has a mental age of 8 years and 4 months on the Stanford-Binet. This gives her an I.Q. of 112, which places her in the superior-intelligence group, a rating reached by about one child out of ten and usually by those of a superior type of home surroundings. The qualitative analysis of the Stanford rating gives no indication of any peculiarity. She has a basal year of 7, passes all of the

8-year-level tests, except the vocabulary, and scores 6 months credit at tests in the 9- and 10-year levels. There is no abnormal indication in any one of the test responses. Her drawings are precise, neat, and well done for a child of her intelligence age. Performance tests reveal unexpected abilities. On the Seguin formboard she scores the average time for a 10-year-old child. The Knox imitation series rates her at the 14-year level. The Goddard adaptation board is passed at a 7-year level. The Healy pictorial completion score is 469, which is between the 11- and 12-year median scores. On the Porteus maze series she scores 9 years, 6 months. All of these tests are done with a minimum of error and with the best type of skilful, unhurried, efficient movements. The Porteus lines, however, reveal numerous fine tremors.

Her general information is far in advance of that generally exhibited by even an 8- or a 9-year-old. She talks in serious fashion about any and all of the family problems. Her knowledge of expenses, household needs, community gossip, school situations, her own condition and needs, her mother's problems, the father's behavior, is little short of pitiful. She has had no carefree childhood.

In school work, despite the fact that she has been out a great deal, she does just about what second-grade children should do. She scores up to third grade on the Ayres spelling test. On the Ohio Literacy she reaches the second-grade median score (it is only the third month of school.) She does all of the second-grade requirements in combinations and reasoning problems in arithmetic, knows her tables, and writes and counts numbers to 100. Her writing scores to 30 on the Ayres scale. She is slow in handwork, but the results are of exceptional value for accuracy and neatness. In school with a special group of nervous children on the morning of the full examination, she showed no actual tendency towards peculiarity of action. She was a

little more shy than children as capable as she usually are, but responded well to commendation and suggestion.

The Kent-Rosanoff association series showed very definite disturbances of associations. The test was done at about an 11-year level. The number of individual reactions given was seventeen. This is not excessive for such a young child. Qualitative analysis of these seventeen individual responses revealed the abnormality of practically all of them. They indicated a very definite complex which had in it the ideas of *men, man, bed, cruel, mean,* and *afraid.* Other reactions, although apparently what one might expect in response to the words given, reflected these same ideas that center around a night fear of something mean and cruel which is attributed to some man or men. The complex was indicated by delayed reactions, pallor, hesitant speech, averted face and the parenthetical use of "why," followed by a rather explosive pronunciation of the reaction word.

The psychological findings removed at once any doubt of the normality of intelligence level. Serepta did more than one would demand of any child of her age on the intelligence tests, performance series, general information and educational series. It was merely the quality of her responses on the association series, perhaps the distribution on the same series, the slowness of written work, the behavior in the laboratory and the shrewd wiseness of her knowledge about herself that led to a diagnosis of a psychopathic condition with the association tests definitely indicating the need for analytic work as a possible means of relieving some of the repressions. It was necessary to see what further evidence could be obtained to corroborate or modify this diagnosis.

Personal and developmental history. Serepta is the third of three children. The mother was well during pregnancy and under no definite strain, doing her own work on the farm but quite well enough to stand it. The birth was

normal and at term. The child weighed 11 1-2 pounds and was a blue baby. She gave indications of this condition until she was 14 months of age. She was artificially fed. She seemed half-starved for the first 5 months, no food actually agreeing with her. After that, she got along all right. At that time they noted that she was always screaming. She held up her head at 7 months, sat up alone at 9 months, got her first teeth a little before this, whispered "papa" over and over for a whole day at the age of 8 months, said it aloud the next day and gradually and regularly added other sounds. She never crawled, but walked at 14 months, although she was very heavy. At one year of age she had measles and chickenpox, scarlet fever at one and a half years, and whooping cough at 2. When 2 years old, she had some disturbance that was thought to be infantile paralysis. Her neck was stiff, the left arm was paralyzed, speech affected, and she would suddenly become very hoarse when trying to talk. Improvement began in four or five days, and she could use her arm a little in about two weeks. About the age of three and a half she was so troublesome and nervous that she was put on desiccated thyroid and has been kept on it until the present time. The mother feels that she would be impossible to handle without it. She had a tonsil and adenoid operation a month ago and has not been real well since. Has been troubled with nocturnal enuresis at times to date and with diurnal enuresis until about the age of 6.

School history. Serepta began school a year ago last September. She passed first grade successfully last year and seemingly had none of these behavior difficulties. She is in the second grade, is very fond of her teacher and is anxious to go to school. She regrets especially missing days on which they have art and music lessons. She had a general grade average of 87 in passing from first grade, with a deportment grade of 95. The teacher reports that

she is never any trouble when there and can easily get along on part time attendance if this is necessary.

Behavior. The family lives in a small town where Serepta has a big yard and plenty of shady lots and walks to play on, if she wants to go away from her own yard. The porch at her home is the center of attraction for the little neighborhood group and has had as many as seventeen children playing there on a warm evening. Serepta is very fond of her dolls. She likes to play school and house, sew for her dollies, and, in general, imitate everything that is done in the home, but the imitation must have practical worth. She wants to make real pies and cakes, cook real food, sew things of some actual worth. Her mother has found time to meet and help this desire until the child is fully as capable as many girls in their teens. Lately she cannot play without coming in crying with some cause for complaint. She seems to think the other children do things to her. The mother says, "Actual happenings have an exaggerated importance." She is very affectionate and usually obedient, save in spells such as she has had the last few months.

Family history. There have been three children of whom Serepta is the youngest. The oldest is a girl of 16 who is in the third year of high school. She is seemingly healthy, but has had asthma this last year. She gets very nervous and tense at times, worrying especially over this younger sister of whom she has taken charge a goodly part of the time. The second child died at three and a half months of "bowel trouble; the doctor said she had tuberculosis from being nursed and not getting enough nourishment." Serepta was born five years later.

The father "has never been healthy." He has always suffered from nerve strain, a goitre, liver trouble, and the like. He was a farmer, farming in a small but comfortable way, when, several years ago, he was assaulted by an-

other man and rather badly bruised and beaten. It was a case of "mistaken identity" in a neighborhood feud. According to the medico-legal expert to whom the case was referred for investigation, the man walked around for several days and did not suffer any apparent injury, more than a few cuts and bruises. By that time interested individuals had gotten hold of him and, justifying their solicitude (?), he developed a definite paralysis. For months he was unable to walk, then gradually learned to make his way around with crutches. With the aid of the same kindly people he instituted a suit for damages and was awarded the full amount claimed, $10,000, although the medical expert called to testify as to his condition refused to testify to anything but hysteria, since he walked with one type of ankle clonus in the courtroom and another outside! Throughout this time, as he was gradually getting well, numerous other symptoms arose. He was angry and irritable over little things, took pleasure in being cross with this child when there was no reason for it, became suspicious of poison in his food, thought his wife was untrue to him, and, later, when he was working again, refused to give any of what he earned towards the upkeep of the house or table, although his wife had only a small checking account in the bank upon which to depend. At last he started divorce proceedings, making all sorts of charges against his wife, none of which he was able to substantiate. Before the wife was granted a divorce he tried to get Serepta to go off with him and even threatened to take her away where she would never see her mother again. This definitely scared the child. His whole family has a reputation in their home county of being "peculiar." No definite items to this effect have been obtainable, for after he married his wife held him up to the standard of living to which she was accustomed, and this meant very little contact with his family.

The mother is uncommonly intelligent and in most ways

an unusual illustration of common sense. She is highstrung and nervous, but takes most situations with a humorous philosophy that enables her to make the best of the situation. She is energetic, industrious, alert, progressive, a born manager. The only trait which makes it at all difficult to work with her is a tendency to resort to patent medicines but even this is not as marked a habit as one usually finds it in the small town family. Her own family seem to be normal, self-respecting people who stand by each other and have definite ideals of what they mean to reach, although this is largely a matter of comfortable income, getting a new car, better furniture, living better, etc. They are a typical family of the American working class. The maternal grandmother of our child suffers from a definite and constant head tremor. (No other neuropathic symptoms have been found, although most of the family have been seen and the others investigated since the time of this first interview.)

Medical findings.[1]

Anatomical: developmental. At present the child weighs fifty-six pounds. Last May she weighed 62 pounds, her greatest weight.

Habits. Her diet is a general one except that she refuses milk and eggs.

Physiological

Gastro-Intestinal Tract. No masses or sores in mouth or throat. Appetite is fair, irregular. Tongue is not coated. No. P.C. pains. Nausea when hungry or tired, does not vomit. Bowels are regular. No hernia. Has abdominal pain.

Urinary Tract. Has frequency. Nocturnal enuresis recently. Small. Incontinence at times, no difficulty starting stream, no dribbling, no pain, no edema.

Heart. Always has rapid heart. No dyspnœa at rest. Hands and feet not cold, no pallor.

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[1] Acknowledgment is due Drs Dodd, Forman, and Gordon for this intensive and accurate report.

Locomotive Apparatus. Complains at times of aching all over the body.

Physical Examination. Patient is well developed child apparently, seven years old. Is very resistant to examination.

Head.

Scalp. Normal, hair brown.

Eyes. Sclera and conjunctivæ good color, pupils react to light and distance, ocular movements normal.

Ears. Normal.

Nose. Normal.

Mouth. Upper gums thickened by the descent of permanent incisors which are about to be erupted. Mucous membrane of good color, gums in good condition, teeth fair.

Throat. Tonsils have been recently removed.

Neck. No adenopathy, thyroid not enlarged.

Chest. Well developed, well nourished.

Lungs. Fremitus normal, resonance clear throughout, breath sounds vesicular, no rales.

Heart. Normal in size and position, rate 120, rhythm regular, sounds of good quality, no murmurs.

Abdomen. Contour normal, no tenderness, no rigidity, no tumors or masses.

Bones, Joints, and Extremities. Spinal column normal, no ankylosis, no deformities, function normal.

Reflexes. Patellar, pupillary and abdominal normal. Romberg normal.

Blood

Count:

Hemoglobin (Dare)	100 per cent
Red blood cells	5,120,000
White blood cells	7,700
Differential count:	
Polymorphonuclears	70
Lymphocytes	22
Mononuclears	7
Eosinophiles	1
Basophiles	0
	100 per cent

Wassermann:
Technique:
Icebox fixation .....18 hours (6° C.)
System .....Anti-sheep hemolytic
Result:
Negative

X-ray Observations. Fluoroscopic examination only reveals:
1. A normal bony cage
2. Clear lung fields
3. Cardiac shadow that is normal in size
4. Supracardiac shadow is also normal
5. The diaphragm is free and unrestricted in its movements

Summary. It is not difficult to see that the family history, although limited to the immediate family group, indicates a neuropathic predisposition that almost predicts what may happen to Serepta. The father not only has a definite neuropathic tendency but this, probably precipitated by accidental shock and suggestion, takes a form of expression that is definitely psychopathic, if not actually psychopathic to the point that he was suffering from a psychosis. The mother, too, bears a heritage of nervousness, or at least of a neuropathic diathesis, which accentuates the heritage from the father. The oldest child bears her symptom, asthma. The second dies, the third, Serepta, reproduces more nearly the father's instability. Her early history shows behavior disturbances from the time of the paralysis on. The present crisis seems to be entirely a mental one, although it is probably accentuated by the overstimulation of such constant thyroid feeding. The immediate need is for relief of the mental symptoms. The complex indicated in the association series shows the approach to this through psychoanalysis. Although the child was going out of town the very day these data were ascertained, it seemed worth while to attempt at least one analytic interview. Children sometimes gain great relief from a modicum of such attention, and at the same time one in-

terview leaves one definitely informed as to the need of such work and the probable relief to be gained from it.

Analysis. The mother went into the next room, presumably to rest, but where she could gain an idea of the method and procedure so that she might be able to carry out some further work. It did not take long, beginning with a little discussion of her father's illness, to see what the trouble was. Serepta had always been the father's favorite. He had always stood first in her affection. After he was ill, he was cross to her, tormented her, did things to make her feel bad. The mother stood by her, protected her, was in danger herself of being hurt by the father. Her intelligence made her feel that she must think most of her mother who took care of her, but her actual habit of affection made her want to keep the father in first place. An issue in which it became necessary to obey the mother against her own inclination would at once bring up this other desire to care rather for the father. The indecision of mind that resulted brought a regression from the whole situation back to babyhood kicking, crying, and screaming. Intermediately, spells were made up for by unusual affection. Money worry, since the father did not provide, and fear of being left alone if something happened to the mother added to the problems that worried her. The older sister is a surrogate for the mother and so is viewed in the same way.

This is all that was accomplished in the first analytic interview except that the suggestion was given that the father was ill and did not mean what he said and did. This explanation will ease her own suffering and pave the way for tolerance of being separated from him as she grows accustomed to the situation.

Recommendations. After a summarizing of all findings available, the only thing possible seemed to be bringing the child to C . . . . . for a continuation of analytic work.

This recommendation was made. The mother did not feel it possible to arrange things thus. Giving the oft-repeated argument, "You can't understand because you aren't a mother," she asserted that it would be worse than a crime to have the child here away from her, and that seemed to end the matter.

Subsequent history. The clinic examination trip was followed by a few days of high temperature, and then the child was reported as doing better. Six weeks passed. Without any warning Serepta and her mother, bags, baggage and dolls, walked in one morning. They had come "to stay." Serepta seemed worse in every way save one. She was not so apt to stumble or bump into things as she was at the time of the first interview. She was nervous, fidgety, and seemingly indifferent to all around her. She had "had no thyroid since she was here before, but she had had to have a sleeping medicine regularly and codein every night or two since she was here." About a week before this trip her tantrums reached a climax. She wanted to go to her grandmother's for the day. The grandmother was going to take her, and the mother was going after her. She got to the station all right and then became very much excited. She wrung her hands and cried and said she did not know what to do. In the train she cried and clung to her mother, but when her mother told her she did not have to go she said she wanted to. Finally, the train pulled out with her still crying but she stopped (the decision being made) and was talking cheerfully by the time they were outside the town limits. She said during the spell that she "felt something would happen."

The mother reported:

> Lately she fixes her mind on something and then she tries everything to get it. When we came home from her grandmother's, she went into the ten-cent store with me and saw a doll's carriage which she wanted. Now she has a fine carriage

at home, and yet she wanted this one and fussed because I would not get it. Then we came out of the store and her hat blew off. She fussed and yelled and would not put it on again and I had to carry it. When we got to the house she did not come in although it was dark, but stayed on the porch alone. After about five minutes she came in and was all right.

The day before they came to C . . . . . to stay the father tried to get two doctors to see Serepta and say that she did not need to go away. The mother's physician was off on a country trip and could not be reached until late afternoon. She managed to avoid the interview until his return. By that time it was so late the other physicians used that as an excuse and did not come. Of course, Serepta heard all about the matter and for two hours cried and yelled and had to be held and rocked.

The mother seems to have a definite medication complex. She says that before Serepta had thyroid she used to stand and refuse to come into the house if called, but that she never does this now(?). When they went back home from their first trip to C . . . . . she went to the doctor and told him Serepta would never get well without medicine. She suggested that he give her some "digestion" medicine so that she would be happy.

All of this detail having been given, the mother arrived at the real reason for her precipitate arrival. For ten days or more Serepta has been threatening suicide. She gazes into the well and the cistern, talks about death and asks many questions about how it feels to drown.

The mother has promised her that she need see no doctors while in C . . . . . She also agrees not to give her any drugs unless a special emergency arises.

Despite the fatigue from the trip, analytic work was begun with Serepta that very day. An association test was given first. This revealed a group of complex indicators practically identical with those given in the earlier exam-

ination. To ease the immediate crisis, work was begun that invited confidence on the question of dying. Definite inhibitions were manifested before the subject was actually broached, so we turned easily to the subject discussed at her earlier visit, the father's behavior and condition. The next day she came into the room and began a spontaneous analysis of her own condition before she had taken off her wraps. This led, without any help, to a discussion of the question of suicide and her desire to die. The idea had come from being taken to the funeral of a woman who had committed suicide. (Later questioning of the mother on this point brought the statement, "Since it was a Catholic funeral and she had never seen one, I thought I better take her.") Needless to say, the suicide idea was but another form of the escape motive that had dominated Serepta's whole life. The telling gave some help. Conscious reënforcement of the desire to live, through telling the ancient folk-tale of the lost souls who wander forever through darkness because they dared make the godlike decision that they had lived long enough, was most effective. Further work built up plans for things to be done in the future, as she grew up, and this phase of the matter seemed completely annihilated when she spontaneously announced on the third day that she was going to live and "grow up and marry and have children, about six or eight, and maybe if I marry before Dora [her sister] mother will give me the piano instead of her." This was an overdetermination of the will to live, for she later discussed the question of having children with her mother and decided two or three were enough.

The very night of this relief the child slept over eight hours with no drugs. From that time on she seemed happier. She played in solitary fashion, ignoring other children in the mental-hygiene group she was with each morning. After three weeks, the mother, satisfied that the method of approach was the right one, planned to leave

her in C . . . . . indefinitely, in a boarding home. This exaggerated symptoms to some extent, but even then no tantrum appeared. Indeed, there have been none since the day before she came to stay in C . . . . . Analytic work fell into a matter of spontaneous conversation, at first each day, gradually at longer intervals, although she was seen each day, continuing in the special class for nervous children. At first she did no school work, and none was urged on her. Typewriting spelling interested her so she asked to have spelling lessons. Then language was added—to write letters home. A week later she spontaneously joined the reading group. In six weeks she was carrying everything a child of her age should, arithmetic, reading, writing, language, spelling, stories, hygiene, play, cooking, sewing, drawing, geography, and woodwork. At the same time, as her fears were analyzed out, she came alone to school, went errands alone, sang and played alone, became, in fact, a happy, healthy, contented little girl, whose face grew rosy and whose eyes were bright. After four months she returned home, bearing the shock of the old environment fairly well, but developing some worry tendencies again. These she managed and analyzed spontaneously.

At this time she was reëxamined. She was just 8 years old and scored 9 years, 4 months on the Stanford. This was a growth of twelve months in mental-age in 6 months. Her school work was passing for second grade in all subjects and for third grade in spelling. Writing measured 50 per cent on the scale whereon she had previously scored 30 per cent. Performance tests showed a uniform gain of one or two years. Her general information was much more varied in so far as it concerned things of interest to children—games, stories, the zoo, circuses, movies, matinées, shopping, clothes. City life in general had given her interests and knowledge. Her association test was much more normal in distribution and indicated

no complexes. Her physician reported a healthy child with normal temperature and with a heart rate down within normal limits of variation.

The long-drawn-out divorce tangle drew her into its meshes and, despite all that could be done, she was subpœnaed and taken into the courtroom. Even this dreadful experience precipitated no tantrums, but merely a crying spell. Once the experience was over it seemed to give a permanency of relief that was most gratifying. The psychopathic reactions had been rather effectually eliminated by her nine months of right living wherein they were given no chance to reappear, and even such an unusual strain was normally withstood.

But the neuropathic substratum was still present. It was just a year from the first symptoms of clumsiness, walking queerly, tripping, and dropping things; just eight months from the time analytic work was definitely begun, when, ushered in by a prodromonal period of high temperature, the same signs reappeared. Observation during their presence gave a definite diagnosis of chorea, or St. Vitus' dance. Repetition of the psychological examination at this time showed no ideational content of worry or distress. The association test gave a distribution similar to that given at the first examination ten months previous and to that obtained eight months before, the day analytic work was begun. The increased number of individual reactions in this test was not, however, qualitatively like the reactions in the earlier group. There were none of the same complex indicators present. Instead, the individual reactions seemed to be due to extreme rapidity of fatigue which led to a use of the most superficial type of associations, chiefly those suggested by the environment and recent chance experiences. For instance, seeing a messenger boy on the street as she came to the office was, she explained, the reason for her response of *message* to the word *street*.

This episode of physical handicap through chorea lasted practically five months. The attack was much more serious than the former one and kept her completely helpless in bed for five or six weeks. Naturally, the expectation of all concerned was that she would redevelop some of the earlier propensities to tantrums and naughtiness. Nothing of the sort occurred. Her superior intelligence and good sense carried her through the whole trying experience in a most gratifying fashion. There were several days of depression to the point of crying, but the only thing to be wondered at is that there was not far more of such behavior. Five months from the onset of the spell she was again fairly well but easily fatigued and not back in school. Another two months brought complete recovery, interest in all of her old toys, new friends, desire to do what other little girls do and a tentative trial in school.

Three months after this period of complete recovery the onset of hot weather brought some recurrent symptoms of nerve disturbances. Poor sleep, rapid fatigue, some loss of motor control and general irritability were reported by the mother. A thorough re-study of the case was made, in an attempt to gain a new perspective on the situation. For the first time in the whole period through which the writer had worked with Serepta her symptoms grouped themselves in such fashion that the tentative diagnosis of congenital syphilis seemed plausible. A medical reëxamination was consequently made, but all laboratory tests were again negative. Only one suspicious new finding was present—the upper middle incisors had finally appeared and were very widely spaced. The psychological findings of lack of motor control, superficial verbalism on many tests, irregularity on exact language tests, diffuse, sketchy drawings, meandering here and there, and a marked egocentric tendency led to the recommendation of provocative treatment.

She was given bichloride of mercury, gr. .01, three times

daily. Within a few days a slight intestinal upset necessitated the reduction to two doses a day. This amount she has been able to assimilate with no untoward symptoms. Two months have passed. The general nervousness and lack of finer motor control are disappearing. Serepta has gained rapidly in height and weight and has had only one afternoon of irritability in that time. Her association tests indicate a more stable, normal condition than at any earlier period. Her play interests reflect the change in motor ability. The last two weeks have seen the development of complete absorption in sewing for her tiny dolls. Their outfits reflect exact planning, careful cutting, fitting, and sewing. Her present need for supervision is limited to just one point, she has to be kept from doing too much.

Prognosis. We have here a child who has had a neuropathic diathesis. This is a matter of inheritance. It has already evidenced itself in many ways. We actually know that she is a neuropathic individual, for her past holds several neuropathic episodes. But this is not all. The mental strain of family conflict the last two years was too much for her poorly endowed system and provoked psychopathic symptoms also. These have been cleared up by analysis and corrective education, but the nerve instability has evidenced itself as a physical symptom again. Neither medical nor psychological methods taken separately will ever be enough to handle this child successfully. The latest episode has been as purely a matter for medical care and treatment as the one a year previous was for the psychologist to eliminate. The probability is that Serepta will never be "cured." Strain, unusual fatigue, worry, the stress periods of adult life will tend to produce some lapse of function in the weakest part of her organism, that is, the nervous system. All that we can hope to do is to anticipate such strains and build up as healthy and strong a body as possible, accustom it to right habits of activity

and to those only, and then reënforce this tendency towards normality by constant training of the superior intelligence with which we have to deal. Fears must be sublimated and find their expression in learning and doing. Worries must be faced and analyzed out into parts that can be handled easily. Corrective mental hygiene is our only means of salvaging this individual for a future that holds possibilities of great good to the community.

It would be much easier in many ways to have presented, as an illustrative case, a story of an individual whose problems have been solved, difficulties eliminated or corrected, and whom we can report as living happily ever afterwards. There are such cases. But they are the spectacular exceptions. The clinical psychologist should not complain if he sees but few of this type, if he has to be content with bits of improvement in impossible individuals. It is the necessity for the continued struggle against overpowering tendencies and the possibility of gaining the victory through just such bits of alleviation that form the real problems of the practical psychologist. The partial solution is the everyday problem in any clinic. The fact that it is only partial makes the need for it even more urgent. It is as an illustration of this partly-to-be-helped type of case that Serepta lends her story.

PART II

THE PRACTICE OF PSYCHOPATHY

CHAPTER XII

THE DELINQUENT AS A DEVIATE

WHY must we have delinquency? Juvenile courts, humane societies, playgrounds, dispensaries, and hospitals do their part. Schools, day nurseries, and relief agencies of every sort lend constant aid. Yet delinquency continues. Quite frequently it is even asserted that delinquency increases. At least we know that it is none the less. Why? There must be a reason. There must be some cause at work that predisposes certain human beings to undesirable behavior no matter how hard we try to discourage it. There must be some factor that is more powerful than the fear of law, more insidious than our social workers realize, more persistent than the emphasis school training gives to right doing, too deeply seated to stand revealed in any superficial effort to locate it. All of our attempts at social betterment seem to have no appreciable effect upon the frequency of delinquency nor upon the gravity of offenses committed by juveniles. There must be a cause which is so subtle that it evades the efforts usually made to detect and eliminate it. It hides behind the wrong act itself in the courtroom, escapes detection beneath wrong environmental conditions when we seek it in the delinquent's home, challenges the parent who combats it, and continues producing delinquency.

It cannot be any one specific or definite thing which may be studied, described, and concretely fought against. If it were, the preventive attempts of the last ten years would have produced a more effective decrease in the problems today confronting those who deal with delinquents. It is no

individual thing that causes delinquency. Too many years have been spent following individual causes of delinquency in will-o'-the-wisp fashion, without sufficient returns. The idea that we may hope for any such solution must be given up. In other words, it is not tonsils and adenoids, malnutrition, poor housing, lack of schooling, unattractive homes, poverty, or wealth which brings its aftermath of delinquency. Delinquency knows not the boundary laid down by the presence of any one such condition or group of conditions. Children with diseased tonsils are not necessarily social or moral problems. All those suffering from adenoids do not pass through the hands of the law. The poorly nourished child may be no source of trouble. Crowded homes and illy ventilated rooms have produced masters of men. Those whose education has been limited so that they necessarily "make their mark" are not the inevitable home of evil thoughts. Children frequently run away from good homes and steal without any regard for actual need.

Why do these things happen? Delinquency must follow some law. There must be some underlying similarity in the various traits of children who act outside the conventionally prescribed limits of behavior for "good children." The "bad" child's behavior is in response to some motivation or principle that is fundamental. It shows itself independent of any one set of factors, either physical or environmental. It is dependent upon something much more general and less tangible, shall we call it a predisposition? That is what it really is, a predisposition, or tendency towards, a foundation for certain types of behavior, a potency for developing with great ease reactions which we recognize as undesirable or "wrong." With such a predisposition any or all of the factors mentioned above may readily lead to delinquency, *but* their relative unimportance is well shown by the fact that delinquency may exist without their presence.

What is this predisposition? The effect of the child's environment? How could it be? If this were the case, it would be a simple statistical problem to identify on a map the localities from which come our penitentiary, reformatory, prison, and industrial-school inmates. Cleaning up these districts would, then, eliminate the problem. The environment undoubtedly plays a part in delinquency, a large part in some cases, but a very small part in others. The difference in its influence is a matter of the difference in the individual experiencing the situation. Immediately one meets the question as to why there are more children from the poor districts than from the good districts in the juvenile courts in most cities. The inference is usually made that the slums are directly responsible for the anti-social behavior of these individuals. We may not assume this. Slums are not a part of Nature's plan. They are man-created devastations. If one could eliminate all the slums of a large city and begin over again *with the same population,* there would be slums, of the same sort, in a few months. The slum is merely a concrete, visible expression of indifference to dirt, flies, filth, and herd-like contact. It voices torpitude of body and soul. It advertises ignorance, defeat, and defect. If one studies them carefully, one usually finds at least two distinct classes of slum residents. There are the great group who are living thus without any real effort to change their habits of living. Then there are those who are struggling to overcome their surroundings and to reach such a plane of economic independence that they may live differently. These two groups are radically different in their ideals, modes of living, industry, and purpose. The latter type lives in the slums but is not of them. The former type *is* the slums. They are inferior mentally, incapable, inert. Is it any wonder that their children are delinquent? The group has made its environment and the children bear the outward as well as the inward sign of

their parents' deficiencies. It is impossible for us to blame their behavior upon only one of these inheritances, and that the lesser, secondary, outer one. We are probably dealing with something that results from both of these happening together. Their constitutional or inherited predisposition to inferior mentality and functional inefficiency means that they give in more readily to wrong tendencies if in surroundings that present opportunity for such response.

Truly we may say that certain environmental conditions make for delinquency more readily than others, *but* unless we were to find that *all* children suffering from those environmental conditions had become delinquent, we have proved nothing. Oh, yes, we have proved a minor point. Given the fundamental predisposition, environmental factors may prove to be the exciting or determining cause of delinquency, and they may thus contribute in considerable fashion to the situation. But we must remember that they can do nothing unless they have the right sort of material upon which to work. What is the right type of material? What is this predisposition or tendency which makes so readily for behavior which we are prone to call delinquent? To answer this question we must turn to the study of the child himself, for only in him, as an individual, may we hope to discover the thing which makes him delinquent or non-delinquent, whatever the conditions under which he has lived.

But what is this thing we call delinquency? A mother cat buffs her kitten sharply when it tires of lying in wait for a mouse, its first one, of which it can have no actual anticipatory image. Deep in the nervous system of that mother there must be a concept, simple though it may be, of how that kitten *should* have acted. A mother duck pushes her chance chicken offspring into the water, and they drown. It must surely be a mystery to her, for she,

too, must needs have some ganglionic concept of how her young should react to the presence of a body of water. Was the kitten delinquent? Were the young chickens incorrigible? In a certain sense, yes. Their activities led them into conflict with the reflexive group of inherited tendencies to which their conduct should have been true. Long ages of the struggle for survival have eliminated from the animal mind all save certain successful patterns of response to situations which mean life, food, or death. Certain habits of response are ingrained. Even the maternal response to wrong response in the offspring is rather definitely determined. The individual chick who deviates too widely from these general patterns dies. The individual kitten who cannot respond in true form is apt to go hungry until he adapts.

Is the problem any different when we come to handling human offspring? No, except that the situation is so many times more complex. We know to-day but little of the life of primitive man. Just what he demanded of his children it is even harder to determine. Was development rapid or slow, similar in most children or very different? We cannot say. But some things were necessary if the child was to survive. Ability to cling fast to the mother as she traveled, to keep from whimpering in time of danger, to trail closely, to endure hunger, to scent and see quickly, these were surely fundamental virtues. But man did not stop there. Instead of developing special organs of defense, warmth, flight, and physical superiority, he developed an organ of adaptation, the brain. Birth ushers in his offspring more helpless, dependent, and farther from their final stage of development than any other newborn creatures. They are unequipped with specialized means of meeting situations, and must, instead, learn to use this complex means of *planning* to meet new situations. Such endowment offers, not only every promise of superiority when

properly developed, but gives, also, a multiplicity of chances for deviation and defect in the course of development.

From the moment he is born a child begins the lifelong effort to adapt. Often his very food provokes a struggle that uses all of his vitality for months. Changes of temperature, artificial and partial restraint from clothes, strange rockings and tossings, light when it should be dark, multitudinous noises, all lay their tax upon him. Gradually he meets the need for speech and adapts his tongue and throat to this new usage. Then comes the adaptation to that strange place where he learns those essentials to successful living that are not ingrained in his nervous system—school. Meanwhile he has had to meet another need. His conduct must constantly adapt itself so that it achieves first, the approval of the family, later, that of his increasing group of acquaintances, then, the ideals of the school and, finally he comes to realize that he is subject to the approval of his race as a whole, for he must meet the sanction of their written opinion of what his and other men's behavior should and should not be—that is, law.

It is not to be wondered at that there are a certain number of children who do not adapt readily to that which is expected of them, but who show instead tendencies that lead adults to classify them as "delinquents." The brain is an organ that is comparatively young in its complexity of development as compared with the evolutional development of the body as a whole. Its mechanism is the most delicate and sensitive in structure and function that one can imagine. The demands made upon it by each generation grow greater, not less. It should consequently cause us no surprise when we meet a child with a brain that is not able to respond in the desired fashion to the demands which his generation makes upon him. If one believes in evolution and consequently takes the genetic attitude towards the whole problem of human life and ability, the

presence of the delinquent is in rational accord with the belief that the human race is improving, advancing, or developing beyond what it was many centuries ago. In symbolic fashion we may picture man's development as the adding of new stages of demands and achievements. From the standpoint of the study of mind, that man is the most intelligent who has added the most stages, and who uses his total equipment most efficiently. Accidents, disease, shock, and probably many other things have prevented the full development of numerous individuals, or have caused regression from development actually gained. Such individuals cannot be expected to live up to the highest standards of human activity, standards evolved by those not so handicapped. As a result, they act far more in accord with what we would expect of our early ancestors than in agreement with present-day modes of living. This does not mean that through countless ages there have persisted families which have not advanced or gained development beyond what they then had. "Cave men" probably had their own defectives and delinquents. The only difference is that life was much more severe in those days, and the unfit did not survive. Our present inferiors are probably largely a result of the last few hundred years of lenient support of the unsuccessful and the dangerous. It is not necessary to posit a continuum of defective creatures from past ages as a basis for asserting that we have defectives to-day, for in the same way as the higher levels of intelligence are probably the most recent achievement of mankind, they are the most susceptible to disturbance, defect, and deterioration. Once they are undermined, that which we have left approximates more and more, as the disturbance is more severe, primitive man.

For countless years our ancestors wandered here and there, adventuring as adventures came, living a life of chance and unexpectedness. Is it any wonder then, that

children occasionally revert to the ease and joy of going where they will and doing as they please instead of sitting in uncomfortable school seats for hours, bored with facts and figures that seemingly have no real relation to life? Yet such a child is a "delinquent," a "truant." Do we stop even long enough to wonder whether he is a truant because he has dimly sensed his inability to measure up to the level of the others in the school group and assimilate that which the school offers? Yet this is frequently the case. Is such a child actually delinquent, and if so, what does delinquency mean? Again, long ages ago, man thought only of himself and his safety. It was prowess to be able to steal. Indeed, there was no such thing as stealing. Existence meant the ability to acquire and keep in one's possession the necessities of life. Those who could not accomplish this did not survive and did not, of course, leave offspring. With this trait developed as a necessity for many generations is it any wonder that children sometimes steal and hoard? Such behavior finds its justification in the cell memory of the individual's nervous system.

Nor is the effect of the tendencies of our forebears limited to these illustrative types of behavior. Almost any act of any child can be analyzed to show the part played in its motivation by his inheritance of general human tendencies. He does not inherit the pattern of any one specialized act, but he inherits a nervous system which has the potentiality for many such varied acts. Let us consider even that prevalent and serious present-day problem, immorality. The sexual desire is Nature's own provision for the continuation of her creations. It is a desire second only to the desire for self-preservation and is so closely related to it that the two are sometimes hard to differentiate. Restriction of mating, that is, restriction of the satisfaction of the sexual desire, is a recent thing. Even more recent is the superimposed group sanction to mating, while the legalization of

mating is so recent that we still recognize the "common-law" marriage as moral and honest. And so our communities are filled with those who, because of inferior ability to sense the group code (inferior intelligence), or who because of inability to maintain in true perspective the relative values of things or to properly utilize their desires and feelings (malfunctioning), or who because they see things in distorted fashion because of wrong training, yield to immorality.

One must recognize, without condoning disregard for the law, that there is something more than mere law-breaking in the episodes that fill our court dockets. The group we recognize as delinquent must be looked at from an impersonal, non-vindictive, non-troubled standpoint, if we are to accomplish anything of permanent value in our study of the matter. If man is to maintain that supremacy which he has achieved by virtue of a complex nervous system; if he is to continue in domination of the world because he has become an organism motivated by intelligence; if his defense of his superiority lies in adaption to changing conditions; then only those who meet by adaptive behavior the everyday problems of their own lives are fit to survive and pass on their potentialities to another generation.

The problem is not a simple one, however. We cannot enumerate certain acts and omissions as delinquencies per se and then study the children in whose behavior they occur. Life is far too complicated for that, and our own ideas vary too much to allow such a procedure. Ask half a dozen people what they understand by delinquency, and the probability is great that you will be rewarded with a half dozen answers all of which vary greatly. The dictionary defines delinquency as "failure, omission, or violation of duty." But duty, itself, is a dry thing of obligation and superficially imposed ideals which, in the very mentioning, is quite apt to make us feel sympathy for the reprehensi-

ble youth who has disregarded it. There should be something more vital and more directly appealing to the individual that is violated before we speak of delinquency. The whole scheme of society which expects a child to take such a puritanical and non-emotional attitude towards life is wrong.

But perhaps we are not right in assuming that the American people as a whole are represented by such a definition. What do parents themselves call delinquency? What does the term mean to social workers? Is the judge's idea the same? Do probation officers agree? Not even between the different workers in any one of these groups are we apt to find a consensus of opinion. Unfortunately, in the practical handling of delinquents we meet a tendency which is only too prevalent in many other fields. I mean the tendency to assume that because we are using the same terms in talking about a certain thing we mean the same thing. There is a certain glibness in shuffling words which frequently covers differences of meaning and even lack of meaning. We must analyze below this if we actually wish to accomplish anything. This holds when we speak of delinquency.

A parent admits that his child is "bad" or "troublesome." The admission means but little until we know the ideals of the parent, the social status of the family, the perspective and intelligence back of the statement. One family has the court habit and hales even the four-year-old Jerome in for scolding because it is easier to have him living under the fear of a visit from the probation officer than to slowly build up in him respect for the word of a spineless mother. Another family robs itself even of comforts as well as pleasures and stints the normal-behaving members of the family before it will admit that John is too much for them to handle in a responsible fashion. Yet, in many of these latter cases the constant supervision and care have

prevented any acts that might be construed as actual offenses. Surely it is evident without any further discussion that these two ratings of behavior must be revalued upon some less personal basis before we have data which may be used for generalizations. In the one instance, pride of family, name, and reputation lead to sacrifice and the forgetting of self. It is the mass of families such as this from which our social fabric has been built. They protect their inheritance of ideals and customs with their very life. On the other hand, we have those who feel no such responsibility and who lack even family shame. Indeed, one sometimes feels that they have considerable pride in their notoriety. Their appreciation of social agencies, such as the court, lies only in their appreciation of it as a sort of troublesome foster parent which is to be tolerated because it assumes responsibility for the quirks of their young and has the power to enforce some sort of a terror-induced "goodness."

Is it otherwise with social agencies? I mean those agencies of practical organization wherein men and women spend their lives acting as props to families with weakly developed regard for the ordinary demands of hygiene, decency, and morality. Here one will find a group of workers whose patience seems never-ending. The child who does not fit into one situation is tried in another and in still another, encouraged, rewarded, given medical attention, fitted and refitted to situations with the hope that something may be done for him to solve the difficulties. Another agency is content with a brief trial in poor surroundings, and little supervision is given. Naturally, the children who are finally classed as delinquent by these two agencies will be as different as night and day. Of course, there are all degrees of intermediate variation. Judges, probation officers, teachers, and preachers, are not so different we must needs discuss them separately. No matter what the group

dealing with children, we can usually divide the extremes of opinion into the same categories. We find those who see *facts,* that is to say, delinquencies or items of behavior. Fortunately, we also find those who see *reasons* for the facts.

Delinquency will always mean one and the same thing if we drop our own personal relation to it and study it from the genetic viewpoint, that is, from the viewpoint of the development of the race. Delinquency is a sign and a warning, the red flag which should call our attention to the individual at just that time. Unfortunately, although we heed the warning, our interpretation of it is usually wrong. We are too short-sighted. A child does wrong. He did as he wished. We must deter his further tendencies to similar behavior by making the act unprofitable because of the unpleasant consequences connected with it. These after-effects must outweigh the pleasantness which the desired act brought with it. So far, so good. The law of balance and compensation works. Sometimes good results may be achieved in this fashion. But we have not gone far enough. What made the child wish to do what he did? Did he know it was wrong? Why did he act that way, anyway? Usually, until a child is ten years of age, the law holds the parents responsible, not the child. The delinquency is considered an indication of neglect, poor supervision, or lack of home training. Unfortunately, most courts make no attempt to remedy this lack. It is easier to reprimand the parent or send him to the workhouse than to become an educative adjunct to the home.

As a matter of fact there is no logic in such a procedure. The tenth birthday (an earlier one in some states) bears within its 24-hour limits no actual potency for developing a dormant sense of responsibility in the child who has been irresponsible theretofore. Parental failure to discipline and the child's delinquent acts may be due to one and

the same cause. The workhouse or a reprimand does little to enlighten either generation, and it surely gives no aid in determining the cause of such behavior. Of course, the usual argument is that the court has a multiplicity of demands upon it which prevent its handling the individual in any other way. This may be so, but the court as a punitive agency has no business dealing with children. It is a remnant of our earlier religious attitude which regarded wrongdoing as the work of the devil which would disappear when punishment was severe enough to chase him out.

Delinquency is a natural phenomenon. It is as much a part of the growing and changing race as deserted cities, obsolete weapons, and discarded ways of living. It is the result of the mental residuum of former stages, and of imperfect attempts to produce individuals who can live naturally in the present stage of development. It is hard to achieve a perspective that enables one to see this readily. The individual situations of individual delinquents lead us to feel that surely this is the cause of such behavior in one case and that in another. To a certain extent we are right, but those immediate causes are merely the accidents that start the machinery of a certain act. There is something back and beyond this condition that merely "shocks" the child into such behavior. To assign to the accidental factor the whole responsibility for the act is as absurd as to stand upon one of the small peaks in the western part of America and say, "This hill is the Rocky Mountains." This *genetic* attitude should not actually prove difficult to accept, for it is of itself the explanation of much that is otherwise hard to comprehend in the working of the child mind. Man's development is a thing so radical and continuous that we cannot but be proud of it. Why should we then refuse to accept the corollary, that "accidents will happen" and that it is absurd to expect that none will suffer, develop imperfectly, bear the after-effects of disease, develop ir-

regularly, or more slowly? The biologist naturally accepts atavisms and regressions. How can we help accepting the recognition of similar "remnants" of progress from the standpoint of function or behavior? It is just the other side of the same biological manifestation.

Let us work out a practical illustration. Take the matter of food itself. Primitive man ate uncooked food. If we may infer any of his habits from observation of the great simian family in general, he ate a very different diet from even primitive races of to-day. Meat, fruits, cellulose matter, bitter and acid roots and tubers, salty-tasting weeds, fish, mussels, all according to chance finding and in chance proportion were his lot. Starch foods are largely a matter of the discovery of fire, the development of a simple form of sowing and gathering of crops and of a consequent change from a wandering type of life to one wherein the family recognized a more or less permanent home-place. Earlier eating was far more a matter of taste and mouth preparation. Cooking removed the necessity for such prolonged mastication. In a way it also dulled the sense of taste. Cooking was for the group, whether it was a family, in our sense of the word, or a small clan. The sense of security roused by eating as one of a friendly group undoubtedly eliminated the need for constant alertness of taste. Food was accepted as non-dangerous, even if not always highly palatable. The tongue's ability to discriminate was reserved more and more for the purpose of selection of the most pleasurable tastes. At this stage it became an agent of indulgence, not of actual discrimination of food with the grim purpose of maintaining life. Sweets appeared in diet only in natural forms, ripe fruit (when fruit was plentiful enough to be allowed to ripen), and occasional finds of honey.

To-day, food undergoes such elaborate maceration and cooking that mouth duties are less than ever. The bulk of

food assimilation now falls upon the stomach and intestines. The food as it reaches the stomach presents different characteristics from that of ages ago. There is no doubt but that this brings a new and different type of food-self-consciousness. With this there is all of the metabolic instability due to an attempt to support an organism developed by centuries of feeding on certain foods through giving a supply that differs radically. But what *psychic* effect are we apt to receive from this situation? Carlson has aptly reviewed and summarized the experimental work on this point.[1] To-day the consensus of opinion seems to be that hunger actually increases the reflex excitability of the central nervous system and causes definite and actual restlessness. Irritability, inability to fix attention for a long period and, in some instances, headache and nausea are also definitely found. As Carlson points out, however, we must remember that "the precise degree of this central effect will depend on the intensity of the hunger contractions, the irritability of the afferent gastric nerves, and the *stability of the central organization.*"[2]

This condition is well described by the German word *angst,* or anxiety. There is in hunger an actual nervous-system anxiety, with concomitant expressions of this in restlessness and general excitability. What more natural than that these symptoms should show themselves in a child whose body, poorly developed, is nearer the old than the new functional ability. This *angst,* or craving, makes the individual restless. He wanders aimlessly here and there. By chance he finds food, probably left easy of access. By chance he eats. Temporary quiescence and ease follow. It is easy to meet the recurrence of the restlessness in the same way a second time. Each cell affected gives motivation. As the child's intelligence develops he uses it to subserve this

[1] Anton J. Carlson, *The Control of Hunger in Health and Disease.*
[2] *Ibid.,* p. 87 (italics ours).

growing demand which pervades his whole life. The conscious reflex of food-eat-pleasure has been developed. It is by no means difficult to add the next link. The time comes when the child hunts food but finds it not. He happens to find money. His experience accepts the substitution and we have the additional link in the associations formed—money-food-eat-pleasure. It does not take any actual exercise of the imagination to see even the next, more round-about method of obtaining the objective of actual bodily comfort. Money is not forthcoming, but something that can be sold is and we have object-sell-money-food-eat-comfort or pleasure. The acceptance of this habit of reaction depends entirely upon whether its early development formed without correction. If it chanced that the three-or four-year-old evaded supervision successfully and helped himself without any penalty to the contents of the sugar bowl, the cookie jar or the candy box, he has developed into a potential thief. Pennies will prove easily accessible. His thievery is a habit before it is discovered, and it is definitely ingrained into his nervous system, for it has back of it the vital urge of continued bodily pleasure, the urge of self-preservation itself. No one can wonder at the stringency of authority, the extreme severity needed to "cure" such a habit. The thing that breaks down the habit must be as vitally connected with the individual's future well-being as food itself. Nor is this a theoretical illustration. Stomach neuroses of this sort are frequent enough among problem children. The only reason they are not more frequently found is that there are not enough people analyzing behavior back to its actual causes.

One mother whom the writer saw in clinic work gave the history of her little boy, aged eight, having been a constant problem because of such stealing until the age of 7. As the child was markedly inferior in every way, testing at a 5-year level on most tests, a red-haired anomaly in a

family of very dark children, there seemed every reason for investigating her method of cure. With tears in her eyes she told how she had whipped, bribed, scolded, talked to him, put him in bed, "tried everything." Nothing helped. Finally, she took him right after he had stolen some food and scolded his hands and then "pricked every finger until it bled." He never stole from that day. Although one would not naturally think of or advocate such methods, it is evident that the punishment menaced self-preservation in a fashion sufficiently real to make him forego the reassurance which food brought.

In similar fashion one can see that the same angst or unbalancing of metabolism may find other chance modes of expression. For instance, there is no food to be discovered or used as an angst-sedative. Instead, motor activity continues to increase. Gradually, this very activity brings its own sedative of actual fatigue and consequent ease. This activity may take the form of throwing, breaking, smashing, beating, and hitting. It may merely express itself as inability to stick to any one occupation or game. It may lead to wandering and hence to running away, nomadism, truancy. These activities are probably reënforced by subconscious traces which centuries of wandering and restless living have left upon our nervous systems. In other words, the individual easily regresses to an "escape" attitude. This is a type of motor rather than cortical adjustment to difficult situations and is a logical reaction in one who is in any way unstable or unfit.

Maladjustment. In that one word lies expressed the whole problem. The normal child just grows and, as he grows, adjustment to changing situations and to emergencies, to demands made upon him and restraints enforced, simply comes. Everyday experiences of all sorts are the material out of which he builds his ideas, aims and behavior. But with imperfect organisms the problem is very differ-

ent. Situations are frequently too difficult for them to assimilate into their regular living. That which another meets with merely temporary fatigue or depression spells actual catastrophe to them. Meanings of things may not be readily seen. On the other hand, they may acquire habits with pernicious ease and find them unmodifiable no matter how they try. From the social standpoint we are apt to say that these individuals do not adapt readily. This lack of adaptability is the cause of their difficulties with society as well as of society's difficulty with them. Non-adaption is the keynote to incorrigibility, delinquency, ineducability, our chief problems in dealing with childhood. They are problems so closely related they are practically one and the same in many ways. When one studies the problem from this viewpoint, it does not take long to realize that there is a reason for the non-adaptation of these children and that it is one which eliminates all question of their self-responsibility.

The basis of all actual intellectual growth in the individual is learning. In its simplest form this is rote memory. In its more complex forms it may extend to the highest type of abstract thought, such as that necessary to develop a concept. But from one extreme to the other it is the learning process which is essential. However, since we live in the midst of changing and growing things and people, one learning is not always sufficient. A situation changes just a little bit. Our learning of the essentials which fitted its earlier conditions must now be modified. This changing of a thing learned is adaptative learning, or as we usually say, adaptation. Now adaptation to a situation can come in only two ways, that is, either through cessation of the earlier response to the situation or through a change of response. *But,* suppose we have an individual whose ability to learn is limited, or one whose ability to learn is seemingly sufficient but who cannot unlearn or relearn in a

modified fashion with any satisfactory result? We have then a condition of non-adaptation and more, we have the potent basis of social defect, call it delinquency or something else as you will.

If we accept any such line of reasoning, there is but one attitude left for us to assume in our work with children of any type—*There is no such thing as a bad boy or girl. Either the child does not know any better or else he cannot help it.* It is with this attitude that the research reported in later chapters of this book has been carried out.

Such an attitude naturally influences the work one does with the child whose acts are anti- or a-social. It is not enough to assure one's self that the child actually has performed the act with which he is charged and to recognize extenuating circumstances in the environment or in his own physical or educational handicap. If one assumes that the child is not bad, not inherently doing things to disturb law and order because he is "a regular imp," then the whole situation must be intensively studied to determine whether it is his lack of knowledge and hence the responsibility of his older associates which causes his troublesome behavior, or whether it is some innate defect, peculiarity, or mental attitude which is to blame.

Such study is not to be accomplished in a few moments or a few hours, and it will always meet with difficulties, but on the other hand it promises much. If we can begin analyzing delinquency back to its causes instead of contenting ourselves with generalized applications of disciplinary institutions, there is some hope of getting control of the problems that confront us to-day.

We condemn the delinquent when we hold ourselves as part of a righteous group that represents society as a whole.

We condone his offenses and pity him when we realize that he cannot help what he does; our attention is focused then upon the reason for the act.

We accept the act as a symptom of the child's need when we are able to discover the cause.

In this last situation we are just as eager to avoid any repetition of the act, but there is some scientific basis for the action we take, not merely custom and ancient law.

The result is a far more hopeful state of affairs than we have heretofore experienced. No, I do not believe we can eradicate delinquency. So long as the human race continues changing and developing; so long as customs are modified, discarded, or newly developed; so long as we do not have under our control all of the possible diseases; so long as humans marry as humans now do, just so long shall we have delinquents. In other words, we shall constantly have those who fall by the wayside of human progress, and, in all probability, we shall have an increasing proportion of such inferiors. But, if we know the condition, we can deal with it far more successfully. Much of the defect of the inferior may be turned at least into mediocrity of ability. Much of the repeated handling of the same individual for the same offense can be eliminated. Some individuals can probably be saved entirely. Moreover, each year of such corrective work will bring the proper perspective, that of the next preventive step.

We shall always have delinquency, delinquents, the necessity of handling them. The question is: Are we going to handle them as a logical result of our civilization and its imperfections, or are we going to lay the blame upon them, already the unfortunate ones? They are waste material. Have we not seen enough of the utilization of waste material in industrial fields to spur us on to the analysis and utilization of this most expensive of all waste material—human beings?

CHAPTER XIII

A PRACTICAL STUDY OF DELINQUENTS

Holding such a perspective, it is necessary to attempt a practical application of it before one can be at all sure that it is not merely a sentimental way of relieving one's own worry over a problem of social conditions for which each and every adult must feel some responsibility. There is no such thing as a bad boy or girl. Either the child does not know any better or else he cannot help it. Does such a concept work? Is it possible to see back and beyond each and every child's aberrant acts a justification which makes his act the only logical result of his physical, mental, and environmental endowment? The only way such a concept may be justified is to accept the task of studying a group of "delinquents" in the proper attitude, with as careful and impartial methods as are available, and see what may be learned from them.

Such an opportunity was available in the reorganization of the Ohio Bureau of Juvenile Research which was begun in the fall of 1918. It is not necessary to state in detail the technicalities of the establishment of the Bureau. This, with a statement of the perspective and previous history of the movement, as well as with an outline of the ideal planned for the future of the Bureau, has been fully described by Goddard in his recent volume, *Juvenile Delinquency*. The writer was fortunate in being given full authority for the development of the psychological study of the children to be handled under this reorganization. It is this psychological study which interests us in relation to our formulated concept of the delinquent child. What

chance did the reorganized Bureau give for the formulation of methods and carrying out of intensive studies which could modify, or check, or change such a concept and so throw some impersonal light on the problem of the delinquent?

The Bureau had been organized under a law of 1914. But no money was available for its organization. Gradually a small staff was secured, and the first work done was largely that of acquiring a perspective of the actual state problem as presented by the delinquents in the two state schools for such children. This meant the examination of some 1,500 or 1,600 children, chiefly adolescents. Gradually, other types of children were studied. A first acquaintance with the state's problem in the handling of blind and deaf children was made. Some children at the school for the feeble-minded were studied, and the state grew to know its new institution, although the institution had no headquarters which might justly be called its own and was rather a personnel than a thing of permanence. The situation was not far different when, with a certain appropriation, the new group of workers began interpreting their work as a Bureau in 1918. There were offices, but this did not allow any assumption of the chief function of the Bureau as authorized by law. Juvenile courts were authorized to commit juvenile offenders to the Board of Administration for study and proper disposition, and the Board might delegate such study to the Bureau. But the Bureau had no place to hold a child even over night. How then could proper study of him be scientifically made? He might come in tired from a trip half-way across the state, with wrong food as a part of the trip, and with only two or three hours for study before he would have to be sent on somewhere, merely because he needed a place to sleep. As it happened the law had definitely stated three powers of the Bureau:

1. The study of children assigned to it by the state authorities.
2. The study of state wards from other institutions.
3. The study of children referred by any charitable agency or by any individual.

The restriction of the study of wards assigned to the Bureau naturally led to the more rapid development of the two latter types of work. The study of wards in other institutions could be fairly well carried out by sending workers to those institutions. This was the type of work done before 1918. The study of children referred by private agencies and private individuals naturally meant simply clinic consultations. The number and source of such consultations depended largely upon the value of the work done and the gradual education of the public to the use of such a clinic. Enough work was soon available, however, to enable the workers to formulate a definite plan for complete examination. Six months of everyday experience with such a tentative plan gave a practical basis for the formulation of a procedure for examinations and research, which was put into routine practice when the opening of a small cottage, capable of housing about 25 delinquents, at last gave an opportunity for the study of one of the most interesting phases of our civilization—the child who has been delinquent in the eyes of society and adjudged so by the court. In the two years from February, 1919, to February, 1921, 369 such boys and girls were studied under the direct supervision of the writer. The number seems small. But it must be remembered that the study of the children had to be worked out in connection with the many problems incidental to the establishment of a new institution. The work done was definitely experimental, and the writer believes that it has a definite value from the scientific standpoint. It was far from ideal, however. Once it was determined that a child needed medical correction, limited means, politics, and lack of understand-

ing of the big principles of the movement meant waiting until free or practically free help could be obtained for the child. Once the decision was reached that he should be placed in a home and given a trial, the whole machinery of departmental responsibility had to be threshed out. Having found a free home for a child, the money to provide him with clothes, which the placing agencies required, became a matter of vital importance, since the whole original budget for clothing for the Bureau was limited to $100. In one instance, getting clothing took nearly two months. During that time the child took up a bed and care in the cottage which should have been devoted to other new children. In other words, the work done on these children was done under the *usual* conditions in such institutions when the urgency of the problem leads to an attempt to offer relief before conditions are really livable. Even though there was an appropriation of $100,000 for buildings and equipment, this did not mean even ideal equipment. The clothing used was state made, the dormitories were equipped with beds and chairs only, the dining room had the barest essentials. A school-living-room had chairs, tables, a bookcase, a blackboard, a few necessary textbooks, a few story books which were donated, a victrola similarly obtained after a year of effort, a small supply of tools, raffia, old lumber, pint cans of paint, in fact the barest essentials for occupation. The statement of such details is given in order to emphasize the fact that it is far from necessary to have ideal equipment in order to do scientific work. These 369 children who at one time or another during those two years stayed in the Bureau cottages were studied under conditions that made it highly probable that the study of their behavior was not unduly influenced by having them under conditions which made it easy for them to be good. The absence of quarrels, night escapades, frequent escapes was far more a matter of the mental handling

of them than of the actual physical conditions. Moreover, the people in charge of them were selected from such as would apply for a similar position of attendant at any of the other state institutions, for no extra salary was allowed for the difficulty of handling delinquent or problem children.

These children are an ideal group for study in one way, an exceptional group in another. Since the housing capacity of the institution was limited, the value of the study on such cases undemonstrated, and since courts were not officially notified that cases could all be committed to the State Board of Administration and sent to the Bureau, most of the courts sent practically all of their children who seemed to need institutional correction directly to the industrial homes for boys and girls.

Now and then an unusual problem would confront the judge. This was usually considered a good chance to test out the worth of the Bureau. Consequently, the children who were sent in were *actual* problems, not chance or incidental delinquents. Instead, they were the repeaters who had had every type of help the local agencies, the courts, the industrial schools had been able to give. In other instances, the children were up before the court for the first time, but the case would be so definitely peculiar or so obviously in need of special consideration that the child would be sent on at once. In a few instances, nearby courts would first send a child for a clinic examination and, in case sufficient evidence of abnormality or peculiarity was found, would then commit the child to the proper authorities and turn him over to the Bureau for further study. In general, the group represents the opinions of the varying state districts as to children who actually needed observation. The symptoms are probably more extreme in these cases than in the general run of court cases in any one district or town. On the other hand, so far as any information

can be gained, no one was able to differentiate these children from those who would not be repeaters when they had first appeared in court.

Undoubtedly any state has similar cases and similar problems. There is every possibility that any individual juvenile court could duplicate most of the cases. This but shows the extent and serious nature of the problem.

It is said that there are laboratories in this country where the examination of any individual who comes through the door is carried out with a detail which is absolutely predetermined. The remarks made, the seat taken, the order of even casual conversation is carried on by rule-of-thumb. No such attempt was made at the Bureau. The children came in from all sorts of trips, from detention homes and jails, brought from parole to parents, from the courtroom itself. They came in after trips varying in length from fifteen minutes in an automobile to four, five, six, or seven hours on trains. They came in clean, dirty, filthy, hungry, tired, sullen, crying, apathetic, mad, revengeful, silly, and stupid. They came at all hours of the day, and sometimes at night. Consequently, the first consideration was the fitting of the child into the living program of the institution. Before he was sent to the medical department for a bath and general inspection, an attempt was made to fit him mentally for the situation in which he found himself. This *morale* work was undertaken as a definite part of the psychological study of the individual. He was met with a friendly interest, acquaintanceship was begun, name, home, schooling, and occupation ascertained. Then he was given a more or less simplified statement of why he had been brought to the Bureau, with the precaution that he was first asked if he knew why he had been brought there. Usually he had no idea that his fate differed any from what it would have been if he had been sent to one of the industrial schools. He was told that coming to the Bureau meant

another chance. The workers there were supposed to study each boy and girl that came in and decide whether or not he seemed able to behave properly, if given a chance. Then, too, he was told, the way he behaved there would be important. The fact that a boy could make a good record would count in his favor when the time came to decide what was to be done with him. Of course, a poor record would count in just the opposite fashion. At this time the child would be given an OK slip. This slip, reproduced on page 242, was gone over and explained in detail. The fact was impressed that privileges, such as posts of special honor, errand-boy positions, office boy, attendance on movies and parties were entirely a matter of recompense for good OK records. This talk was always interspersed with a few preliminary tests, one to determine approximately the mental level of the individual and the other to determine to a certain extent his functional normality. Then he would be sent over for general cleaning up so that he might meet the next meal of the institution in clean clothes, understanding what was expected of him, and with the beginning of an attempt to make a good record concretely before him in the signatures on his OK slip, given for coöperation in the psychological and medical examinations.

Of course, such morale attempts must be concretely followed up. The fellow who would break regulations necessarily went to bed at party times each Thursday night, until it was found that going to bed was considered a chance for fun with the nightwatch, then working at some definite task under supervision was naturally substituted. In the same way, the idea was encouraged that all work was a privilege. The child who made trouble was not allowed to work. Only the best boys could turn the ice-cream freezer so that it made good ice-cream. Down-town errand boy was a post of the highest honor next to telephone assistant. There were always children ready for any task

OHIO BUREAU OF JUVENILE RESEARCH

OK SLIP

Name. Week beginning.. _____ _____

PRESS O.S.B.

	S	S	M	T	W	T	F
Rising							
BREAKFAST							
Dormitory work							
Cottage cleaning							
Kitchen							
Dining-room							
Laboratory cleaning							
Cottage errands							
Sewing							
DINNER							
Care of Grounds							
Gardening							
Weaving							
Cottage School							
SUPPER							
Play							
Letter writing							
Bed							
LABORATORY Examination							
Special work							
Errands							
DOCTOR Examination							
Medicine							
Cleaning							
Errands							
Special							
Public School A. M.							
Public School P. M.							

NOTICE!

1. You are responsible for your own OK slip.
2. All privileges depend upon a good OK slip.

H. H. GODDARD, Director.

or errand, willing to carry out the idea of winning worth through service. Party night meant, of course, something to eat, with a few games and occasional prizes thrown in to enhance the value of good OK's. Even at our parties the industrial incentive was recognized. One of the favorite forms of amusement was a "contest." Groups or pairs contested for honor or prizes at such tasks as sewing on buttons, darning stockings, paring potatoes, dusting chairs, making beds. In every instance the test was a practical one made in full formality with judges and a stopwatch before the rest of the "good OK" children. So far as possible the whole institution was run on such a privilege regime. The day after admission, unless a child was found to be ill or definitely upset from his trip, we began the definite work of obtaining as complete as possible a picture of his intelligence level and functioning. The tests used in this study consisted of a required minimal and as many auxiliary lines of study as were applicable and could be given in the time we had for study of him. There was frequently a break in the examining after the first full series was given, for medical needs would take him away to a hospital or leave him with drops in eyes, or some other handicapping treatment.

The minimal examination of a resident case consisted of observation from the ten aspects discussed in detail in Chapter X. To determine these points it is necessary to examine the individual on the following tests:

The Kent-Rosanoff association series. This was given the day of admission and again the following day at the beginning of the test procedure.

The Ohio Literacy Test. Given the first day and temporarily used as a basis for evaluation of the child's mental age, since percentiles for chronological age, mental age, and school grade are all available.[1]

1 Violet H. Foster, *The Ohio Literacy Test.*

The Stanford-Binet.

The Seguin formboard, Goddard adaptation board, Knox imitation or tapping series, Healy Pictorial Completion, No. 1. Porteus maze series.

A modification of the Blin-Damaye and Franz general information and practical knowledge series.

A series of arithmetic tests on the fundamental processes, fractions, interest, etc., made up in accord with local syllabi for grade promotion. Language and geography tests similarly worked up. Courtis arithmetic tests, Brown reading series, Ayres spelling and writing tests.

The anthropometric measurements used in Smedley's study.

At least one talk with the child in which an attempt was made to get his own story and to understand his viewpoint, ideals, and desires.

Besides these tests, any of a large group of auxiliary tests were used as occasion warranted and the development of the child permitted. The group used in our minimal series was not ideal but consisted of those tests which, at the time this study was begun, best stood the demands for tests which could be given with high accuracy, little effect of the personal equation, rapidity, general applicability, interpretation into good norms, significance when interpreted. For instance, there is probably less significance in a series of school tests than in any other type of examination. The things taught cover such a wide field of information and so many discrete principles, and vary so much from even village to town that it is almost impossible to gauge how much is due to the child's inability to grasp or retain what he has been taught, and how much is due to his lack of opportunity. Consequently, the time spent on such tests was constantly restricted, more work of other types seeming preferable.

One of the first problems by which one is confronted in attempting to present the data obtained in such a study is the problem of presenting it so that not only are the facts recorded but so that the actual experience gained from the

gathering of such facts is as graphically available for other workers as possible.

It is useless to present an analysis of the whole group in a unit. The range of ages is from babyhood to the upper limits of minority. The range of mental ages is equally great. The offenses vary from incorrigibility, meaning inability to understand commands in one instance, to the same charge meaning lying, stealing, temper spells, and assaults in other instances. The problem is still further complicated by the presence of both sexes, some colored children, a few foreign-born, a few who were merely problems because of some definite physical or neural handicap. Any worker will meet all of these contending and overlapping problems in the course of several years' work. The problem of aiding such a worker's disposition of cases through making it easy to compare his problems with those met in this study means that the group must be subdivided in such fashion that the individual problem to be compared fits into a grouping which is of practical worth because it facilitates handling the new case and determining his future. The chronological age grouping is of no great value for such purposes. Chronological age automatically closes certain avenues of handling a child and opens others. It determines the necessity for some sort of nursing care, or schooling, or vocational training. It determines the possibility of admission to industrial schools in some places, the availability of orphanages, day nurseries, specialized hospital care, and the like. But such items are incidental, and the information gained by this factor must be utilized in relation to the greater problem of *why* certain kinds of care are needed. The practical worker might readily suggest that the proper division is one of mental or psychological diagnosis. But this removes us too far from the everyday world of those who handle delinquents. A psychological diagnosis is, it seems necessary to restate, far more than a

mental age or similar ascertainment. It means lots of time for its determination and the probability of only tentative formulation, at that, in 10 to 30 per cent of the cases. Most delinquents do not have the opportunity of a thorough examination psychologically. However, since the problem is one of behavior, and consequently of mental activity, it is even needless to suggest the use of a medical diagnosis as the basis for classification and suggested disposition. The medical findings are a factor in disposition and treatment in many cases, but they must be related to the factors of primary importance, those which have motivated behavior directly, and which are apt to motivate it in the near future at least.

Perhaps the best we can expect, in most instances, is a study of the child by one of the mental-age scales. The need for this is so great that any suggestion for solution of the problem of any one delinquent without such a preliminary test must be avoided. Delinquency is a behavior symptom. Behavior symptoms are mental symptoms. They are resultants of certain combinations of heredity, disease, and experiences upon the nervous system. They imply factors of comprehension, volition, ideals or desires, planning, directed action. As such, the primary analysis of them, in any attempt to correct or modify them, is essentially an analysis of intelligence or mentality. The use of the mental-age scale is an introduction to such analysis. But just how shall we use such data once obtained? The common practice is immediately to interpret such a mental age into an intelligence quotient. This in turn is interpreted into a diagnostic phrase, helpful in some instances, but grossly misleading in others. It leaves both of the factors of chronological age and mental age to be reintroduced as side factors in determining the situation. Moreover, the possibility of change in the mental age and the I.Q. are left out of this consideration and so, what is merely a temporary

classification of the individual, in many instances, becomes the working basis for handling him for the rest of the years of his minority. Williams' study of delinquent boys is made from this basis. It necessitates in every group the recurrent consideration of the possibility of change. On the other hand, a grouping by mental age allows one to keep more definitely in mind the probability of simultaneous mental growth, chronological-age increases, and physiological growth. Moreover, it avoids classing a child wrongly in a group where mentality is supposedly normal or where it is so low that the inference is that no improvement can occur. The mental age, not the I.Q., is the first logical point of division of children when we wish to consider their responsibility for the situation in which we find them. This one classification cannot solve our problems, yet it will do much to simplify certain aspects of the problem and to render further analysis profitable. Let us at least see what it yields us in this group of cases.

A further point needs emphasis. Averages are misleading. Statistical reports may be accurate, yet all accuracy be lost in gross misinterpretation. This study has been worked out with minute statistical evaluations, yet the writer can see in presentation of more than a minimal amount of such data merely a chance for misunderstanding. The statistical data presented are deliberately an attempt to demonstrate the probable *variability* of any individual studied away from the *general tendency* of the group to which he belongs. One must use norms to measure this variability, but once it is measured the norms become relatively insignificant, and practically a handicap.

CHAPTER XIV

CHILDREN UNDER SIX MENTALLY

Is it possible that children with less mentality than that of the average child when he begins school can be delinquent? In many ways the answer to this question cannot help but be no, yet the child whose mind is that of a 5- or 4- or 3-year-old may well be a most serious behavior problem. The usual tendency is to ignore this group either as too young to bother with or as too low-grade to need more than the necessary steps leading to institutional care. But some young children who are not feeble-minded need consideration, and some who are feeble-minded must have adjustment made to home or community care, since we have insufficient institutional room for all of them. For these reasons of practical demand, not to mention the scientific interest such cases awake, it behooves us to study them carefully when chance permits.

Less than 1 year mentally. The group studied at the Bureau included only one child, a little girl 4 months of age, who belonged in this group. On the Binet-Simon infant scale, the Kuhlmann infant series, and on other series she scored normal or above normal in level. Her commitment was as a dependent with her feeble-minded, unmarried mother. The father is an unknown quantity. Medical findings are negative. The baby's behavior shows no abnormalities, no difficulties of adjusting to the problems of eating, sleeping, and growing. Habit training is taken easily.

Despite such innocent seeming findings, diagnosis on such a case can but be deferred. The mother's inferiority is so

marked, the child's endowment so probably affected by this, that final diagnosis must be deferred. After two months had passed, the baby showed but little change in its relative ability. Is it a case of potential feeble-mindedness? Will it be a simplex normal getting along on the ragged edge of independent existence? It is such cases as this, inadvisedly adopted, which make so much of heartache and trouble as they grow older. Let us give such children every chance for development, but not at the expense of normal families. We need to follow many such cases twenty years or more, so that the various problems of inheritance, delinquency, and dependency may become more clearly understood.

Between 1 and 2 years mentally. Two children of this level were committed, the one as a neglected, the other as an incorrigible, child. Both were boys, 6 and 8 years of age respectively. The anthropometric measurements showed marked inferiority in all respects in one case and in all but standing height and weight in the other. The former case bore physical indications of inferiority such as scaphoid scapulæ, rachitic bones, etc. The latter was practically free from all such signs. Laboratory tests were negative on both. The former was merely a problem for care and permanent provision, the latter was a problem because of antisocial tendencies such as running away, temper spells, and destructiveness. The successes and failures on the Kuhlmann and the Binet-Simon scales were different in that the former obeys directions better, whereas the latter, although disobeying, can draw a circle, comprehend more, and take care of himself in a way the other child cannot.

Diagnoses are feeble-minded, of idiot level in the first case, and feeble-minded, seemingly of idiot level, but improvable and excitable in the second case.

Both of these children are necessarily institution cases. The probabilities are that the excitable case will improve

to the point that he will reach a low imbecile level. Six weeks' observation of him practically showed that he could be taught to talk, while in that time his habits improved to the point of daytime cleanliness, and he was also taught the obedient carrying out of a simple command. Because of the difficulty of handling the excitable cases in private homes, and also because of their earlier and greater response to training, it seems fairly clear that, other factors being equal, an excitable, or psychopathic child should have first chance at institution training.

Between 2 years and 2 years, 11 months mentally. Only two children, a girl of 10 years and a boy of 29 months belong to this group. The boy scored 30 months on the Stanford. His commitment was for observation and training to aid general recovery from paralysis. His medical findings were negative throughout, save for the one definite handicap. The mother was a frail, ineffective girl about to marry for the third time. Observation a year later showed the child retarded and lacking in the normal desire to get around and to be as active as his physical condition made possible.

The girl was nearly 11 years old, yet scored only 26 months and failed on all performance tests. Medical findings showed disturbed reflexes, round shoulders, prominent abdomen, wide-spaced teeth, negative laboratory tests, many minor stigmata. The child is one of 12 children. One other child of the same family, a sibling, as we say, is feeble-minded. The mother is at least very inferior. The father is "but little better." The child is said to have been normal until two years of age. There has been no behavior problem in either instance.

The first case is obviously a home problem, to be taken care of as best they can. However, one may not feel at all sure that the child has been disposed of with any degree of permanency. The mother has the "agency" habit. Better

than any other lesson has she learned the lesson of how to get others to do her worrying for her. The best we can do is handle each demand so as to give the child the best opportunity for future normality. Moreover, this must be done as expeditiously as possible, throwing the responsibility again and again on the mother. The second case is more definite. The child has already been dropped upon the county for care by an irresponsible family. In a children's home she was found impossible. This impossibility is entirely due to her lack of mentality, which means she cannot work, learn, take care of herself. She is truly a state custodial care case. The tryout in a county home, although it may not be fair to some normal children, has been more than fair to her. If paid workers cannot train her as one of a small group of children, many of whom are backward, there is no use giving her the chance to spoil a private home that wants to take a child, when a more hopeful child might well succeed. Her deviation from the normal is too extreme to make her a case that can be socialized.

Between 3 years and 3 years, 11 months mentally. Three children belong here. None of them was committed as delinquent, although the youngest, a little girl exactly 4 years of age, was incorrigible. The other two have been social problems because of their need for special care.

Elsa, the youngest of the three, exactly 4 years old, tests 3 years, 6 months on the Stanford. Her successes in the tests do not go above the fourth year. On performance tests she scores from 4 to 6 years. She is markedly superior in physique, but is lacking in psycho-motor control. Medical and laboratory findings were all negative. Her mother is feeble-minded and delinquent. The father is said to have been an intelligent business man. The child is illegitimate. Social observations of her indicated marked tendencies to negativism and self assertion. Part of this seems

to be a definite attempt to compensate for a feeling of inferiority. Needless to say, diagnosis was deferred. Reobservation two and a half years later shows beginning retardation and increasing instability of function, with diagnosis still deferred. Her behavior is getting to be more of a problem all the time. She does not learn well in school, cannot be managed well anywhere. Yet so attractive is she that only the good sense of the agency handling her has prevented adoption.

Cora, aged 11, tests 3 years, 8 months on the Stanford. "She cannot learn." Her range on the Stanford is from a basal of 2 through the seventh year. Her performance tests show formboard ratings which vary from 8 to 10 years in level. The physical examination reveals a constitutional inferior, with poor hearing, high palate, scaphoid scapulæ, flat feet, but with negative laboratory tests. Morphological measurements place her as about average in standing height, low in sitting height, poor in manual control, but good in lung capacity. Her behavior was unexpected, peculiar, and changed readily as her attention was distracted now this way, now that, by any incidental happening. She is not only feeble-minded but, for her mental level, quite psychopathic.

The third child of the group, Jasper, is one of three brothers, brought in by the father for advice regarding placing. He is over 6 years old and tests 3 years, 2 months. With a basal of 2 he does some of the tests through the seventh year. He is poorest in rote memory and best in verbal ability. He scores below the lowest norms on all performance tests. He is in the lowest 10 per cent of 6-year-olds when compared with the norms for height and weight and psycho-motor control. The medical examination shows exaggerated reflexes, spaced incisors, broad and flat nose, winged scapulæ, protuberant abdomen, and negative laboratory tests. He has a marked speech

defect. His general appearance is cretinoid. The next older brother gives a positive Wassermann. Socially, the child is very helpless even for his actual mental age. He has a violent temper. He is undoubtedly feeble-minded, psychopathic, and a syphilitic.

These three cases, by chance, illustrate three entirely different needs of children of such a mental level. Elsa is so nearly normal in her intelligence level that she must have every chance to develop normally, and this means a home. The functional aspect of her intelligence is at fault. She is so stubborn, so resourceful in a hysterical way in gaining her end, so egotistical and unmanageable, that her future can but be a matter of speculation. One must advise placing her but without adoption. The second case is one of the well-known extremely inferior individuals who, it would seem, can almost be diagnosed at a glance. She demands institutional care not only because of her obvious inferiority but more emphatically because of the erratic and unpredictable behavior that accompanies it. Our third case is not only feeble-minded and unstable, but also a diseased case and, theoretically at least, in need of treatment. Although he does not give a positive Wassermann, he is a younger sib of a known syphilitic and presents numerous stigmata. There is little doubt but that he is one of those cases in which the blood Wassermann findings must be disregarded.

In these three cases one begins to see the value of other data besides chronological age and mental age. The hereditary handicaps of one type or another modify our diagnosis in all three of the cases. In the last case disposition will be partly determined by the need for medical treatment, and the necessity for further work in the family—to ascertain the number infected and to educate to prophylaxis—becomes a part of the responsibility of the social worker. Social, educational, and home observations, with prolonged

experimentation, are slowly working out some of Elsa's problems.

Between 4 years and 4 years, 11 months mentally. This mental level gives the first really delinquent children. Only 4 tested at this level. Three of the 4 were definitely feeble-minded. Three of the 4 were psychopathic. One of the psychopaths had seizures which were epileptoid in character. Another was a congenital syphilitic. Briefly reviewed, these cases were as follows: Eva, 6 years, 11 months old, scored 4 years, 2 months. Her range is from 3 through 6. She fails on the lowest level for all performance tests. She is too low to do any other tests. Medical examination reports reflexes diminished, poor teeth, poor development, laboratory tests negative. She masturbates. Has spells in which she screams and falls. *Diagnosis:* Feeble-minded, psychopathic, and epileptoid.

Earl is 7 years, 7 months old and tests 4 years, 3 months. He scores 4 or 5 on all performance tests, has accomplished nothing in school, fails on all school tests. Tests on the Stanford range from 3 through 7, being qualitatively normal. He is rachitic and gives a positive Romberg. His behavior is that of a babyish child. He was sent in as needing medical care. *Diagnosis:* Feeble-minded.

Rob, aged 17, scores 4 years, 3 months, with a range from 2 through 8. He is vicious, cruel, idle, runs the streets. He scores 8 or 9 on all performance tests, yet he does nothing in school tests. He is totally deaf (tests were evaluated). Reflexes are normal except that eyes are sluggish to light. Other medical findings are negative. His behavior while under observation showed that his obstinacy was largely a matter of not comprehending the situation. *Diagnosis:* Feeble-minded, somewhat psychopathic.

Dick, aged 5 years, 1 month, tested 4 years, 6 months. His tests have a range of from 3 through 8. Marked superiority is shown in verbal tests and definite inferiority

in memory and motor control. Performance tests rate him below 5 years, with failure on the Healy completion and barely a 3-year level score on the Porteus. His blood Wassermann was 2 plus. There is a history of anti-syphilitic treatments through practically his whole life. The mother is no longer able to handle him because of violent tantrums and screaming spells. Besides this he lies, runs away, steals, and is viciously cruel to other children. Observation fully corroborated this behavior history, yet he seemed trainable and soon showed considerable improvement. *Diagnosis:* Deferred.

He seems almost normal in level at the present time, but is so psychopathic, and has such a definite handicap in his syphilitic infection, that one can only wait and watch. Prognosis must be definitely deferred. This case illustrates beautifully the error that lies in prognosticating future development from present ratios of intelligence to chronological age. Dick is struggling against an active and devastating force. Treatment has so far been able to do almost nothing to check even the physiological effects of the disease. Can it hope to check the nerve affects, or will they continue producing these behavior manifestations and result later in such aberrations as mean mental inferiority also? Or will present conditions continue with little change? Do we know enough to determine this now? Decidedly not.

The first three cases are definitely those where the delinquencies are the result of too much freedom and too much responsibility given to individuals who cannot use them. This fourth child has, instead, a positive behavior manifestation of an abnormal nerve activity. The environmental changes stimulate a behavior reaction in the first three which is normal for their level. If the environment is bad, their reactions are accordingly disgraceful. With Dick the excitation to irritable, anti-social behavior lies within the organism itself.

Between 5 years and 5 years, 11 months mentally. Four children test at this level. Even at the risk of becoming tiresome, it seems well to summarize each case briefly. Walter, aged 9 years, 6 months, tests 5 years, 4 months. With a basal year of 5 he does none of the tests above the 6-year level. His performance tests range from 4 to 7 years in level. He is in first grade in school but accomplishes nothing. Medical examination reveals a pretubercular condition. Reflexes are absent. Romberg positive. Morphological measurements indicate marked inferiority. In play he shot and wounded a little girl. His behavior is inoffensive, ineffective, easily controlled. *Diagnosis:* Feeble-minded.

Helen, 17 years old, scores 5 years, 2 months. Tests range from 4 through 8. Ability to count backward and to tie a bowknot add two years to the range of her tests. Performance tests range from 5- to 8-year levels. Despite the report that she reached the fourth grade in school, she does absolutely nothing on school work. Physical examination is negative save for the report of numerous stigmata of inferiority. She was sent in for stealing. The child's own consciousness of guilt brought only the admission that she had stolen a lead pencil, yet she had taken things that were far more valuable. The stealing is a chance consequence of her inferiority of comprehension. *Diagnosis:* Feeble-minded.

Thomas, 9 years old, tested 5 years, 4 months. He is much like his brother Jasper, reported among those of the 3-year level. He is especially good on verbal tests and poor in memory and motor control. On all performance tests he scores 5 to 8 years. He has never been able to do more than kindergarten work in school. He is broad-nosed, cretinoid, short, with exaggerated reflexes, and a 4 plus Wassermann. Morphologically, he measures in the lowest 10 per cent of boys who are 9 years old, save in lung

capacity where he registers 90. He has a marked capacity for getting into trouble. *Diagnosis:* Feeble-minded, psychopathic, syphilitic.

Nardo, 13 years old, scores just 5. His range is from 3 through 7, with verbal ability testing highest. All performance tests place him at a 4-year level, save the Seguin formboard on which he scores 6 years. He has been in first grade in school but has done nothing. Morphological measurements rate him in the lowest 10 per cent. He has an inflammation of the joints of the hands which is referred to congenital syphilis. He has other marked stigmata of congenital syphilis, including sabre tibiae, disturbed reflexes and teeth anomalies. All laboratory tests are negative. An older brother suffers from a similar condition. The boy was referred for placing obstructions on the railroad track. He is difficult to handle, erratic, and seemingly untrainable. *Diagnosis:* Feeble-minded, psychopathic, syphilitic.

Here again we see a group wherein the mental age in its relation to the chronological age is an important factor in determining the diagnosis but where the other aspects of the case accentuate or modify one's decision as to disposition. Sex emphasizes the importance of institutional supervision for Helen. The chance form play activities took in Walter and Nardo are indications of their lack of proper home supervision and hence of their need for custodial care. The fourth child needs not only care but treatment. To many, these children are one and all straight feeble-minded children. They *are* feeble-minded, but they are more than that. They are erratic and unstable in their defect.

Glancing briefly over these low-level cases cannot but emphasize the manifold varieties of problems confronting the worker in the field of clinical psychology. Not all of these young children are hopeless. Some of them have definite possibilities. Some of them will probably stay

much as they are now for the rest of their lives. Can we definitely say which? If not, then even these low-level cases need more time and study than most of us are giving them.

CHAPTER XV

CHILDREN SIX TO NINE MENTALLY

Although the division of the group studied is rather arbitrary, yet it has a real significance. The children who tested less than 6 on a standard scale were those who came under observation in a more or less haphazard fashion. They divide definitely from those testing 6 or over, who form a real group both in numbers and the problems they present. These children are all mentally comparable with what we expect of school children, the former group were not. The division between 9 and 10 is not quite the same. The age of 9 has seemed to be one indicating the height of delinquency problems in a number of studies. It delimits those who may be, if they do not develop more ability in later years, permanent problems for institutional care. It also includes that group that is mentally under the limit for self-responsibility set in most states by law. Although we may not approve of making a child responsible for his own misdemeanors and delinquencies, yet it is well to take cognizance of such issues. The children in this group are in many instances over 10 chronologically, yet mentally they lie in the stage of development which the usual child has passed by the time he has reached his tenth birthday. With them we shall have the same attitude as the court, they are not liable to institutional segregation or similar punishment for they are not sufficiently developed to assume responsibility for their behavior. Let us see whether analysis of the group confirms, weakens, or strengthens this attitude.

Between 6 Years and 6 Years, 11 Months Mentally

This is the lowest level at which there is anything more than a chance group of highly variable individuals whose commitment was largely a matter of accident. In all, 18 of the 369 children studied test at this level. The chronological age of the group varies from 7 years, 1 month to 16 years, 1 month. In a classification by mental level, consequently, the diagnoses would range from normal in level to feeble-minded, for the I.Q.'s range from 93 to 42. Five of the group are 9 years of age, 4 are 10 years old, and only 3 are above this age. Only 4 of the group are girls. One boy and a girl are negroes.

Delinquency charges. The offenses upon which these children were sent into court and then to the Bureau are varied. Nine are unmanageable or incorrigible, 6 are thieves, 4 have perverted sex habits, 1 is actually immoral, 3 set fires, 4 run away constantly. A few are reported as having temper and yelling spells, being profane, attempting stabbing, the destruction of clothes and property, and indulging in extreme tantrums. In all instances but one, there were at least twofold charges.

School grades. One of the children has never been in school because of an offensive physical condition. Eight of the others have never gotten beyond first grade, 4 are in second grade, 2 are in third, 2 in fourth, and 1 is in fifth grade.

Stanford range. Eleven of the 18 have a basal age of 4, 3 have a basal of 3, and the others find it at 5. The successes above the basal range through at least 3 years in all instances but one. The mode is a range of 5 years above the basal, whereas the average range is 4.6 years. In 5 of the cases there are double basals, with a year intervening in which there are definite failures. Only one child of the group of 18 successfully completed a test above the tenth

year, that being the ball and field test in the twelfth year.

Stanford distribution. The most marked failure in the lower-level tests is the patience in the fifth year. This is missed by 8 out of the 18 children, although no other test at that level is missed by more than 3 individuals. The discrimination of right and left is the hardest at the 6-year level and is failed by 10 out of the 18. The repetition of sentences is next in difficulty. The seriousness of this last failure is corroborated by the number of failures on the repetition of digits in the seventh-year tests, 10 of the 18 falling down in these attempts. The other tests are passed with a much higher frequency. None of the failures above the seventh year stand out as peculiarly difficult, except the vocabulary in the eighth year which is failed by the entire group. In the same way, every test in the ninth-year group has some successes except the making of change, on which all fail.

Stanford quality. There are only a few indications of very peculiar reactions which may be taken as other than normal. The majority of symptoms which make for abnormality in higher level groups are but remnants of test qualities frequently found in lower levels but not to be highly evaluated there. There are poor motor control, some perseveration in answers, automatisms, irrelevant answers, but beyond that the interpretation is dubious in value.

Association distribution. This test was not feasible in 4 instances and met with failure to understand the directions in 2 others. There were phrase reactions in 7 of the 12 successful cases, but they are numerous in only 5 of these cases. Individual reactions range in frequency from 1 to 97.

Association quality. There are many complex and experience indicators. Individual peculiarities are revealed in almost every case. From the standpoint of learning to

know the individual, the test is well worth a trial, even at this low level.

Performance tests. The Seguin formboard gave an average mental age of 6.8 years with a mean variation[1] of 1.1 years. Some of the children score as low as 5-year rating, whereas others reach an 11-year score. There is some relationship between chronological age and success on this board, but it is not a controlling or decisive factor.

The average score on the adaptation board is identical, 6.8 years, with an identical variation, 1.1 years. However, the ratings of individual children on the two boards are by no means identical, although they tend to be similar. Some children rate as much as 2 years higher on the adaptation series, whereas others rate 4 years lower on this test than on the formboard. The year ratings on the two tests agree in only 3 of the 18 cases.

On the imitation series the average mental age was 7.3 years, with a mean variation of 2.1 years. The scores range from 4 to 14 years. In only 5 of the cases does the rating given by this test agree with that given by either the formboard or the adaptation series. In 2 cases all 3 of the ratings are identical.

The Porteus was given to only 12 of the group. The average score was 6.5 years with a mean variation of 1.5 years. In general the performances ranged from a score of 3 years to one of 8.5 years.

Thirteen of the group were given the Healy pictorial completion board. Six of these made scores which lay below the lowest standardization. The others varied in score from a 5- to a 9-year rating.

[1] Throughout this discussion the mean variations are presented without the repeated usage of the term "plus or minus." A mean variation is an average deviation from an average. It is the study of a fluctuating factor which may, in individual cases, vary either way from the group average or mean. It has seemed simpler to remind the casual reader of this and then leave the text less complicated by reiteration of a constant quality of the mean deviation.

School performance. Half of the 18 were too low in school training to read any of the literary test. The rest ranged in scores from —1 to 13 points. This highest score is an average third-grade performance. None does any second-grade work in any other subject, and in most instances these children do but little on the first-grade elements.

General information. The group as a whole has far more intelligence and shrewdness on matters of everyday experience than one could well imagine. On the other hand, most of them lack all of that pleasant nicety of detail which a child of good environment has when he begins school.

Own story. The group cannot tell what has happened to them nor why they have come where they are. They tell bits of experiences; it may happen that the bits are relevant, it may happen otherwise. The items given are valuable as reflections but not as information.

Behavior under observation. Six years of mentality is sufficient to bring out abnormalities of behavior under institution care. There are some of the group who fitted nicely into the humdrum routine of such living. Others submitted to it only when they could not find a means of escape. They reflect definitely the charges which brought them to the Bureau.

Medical findings. The group, as a whole, is physically inferior. They bear definite stigmata of maldevelopment and have numerous minor physical defects. The reflexes are abnormal in 8 instances, eye defects are present in several of these and 6 others. Four cases give positive Wassermanns, whereas a fifth case is undoubtedly syphilitic despite a negative Wassermann. Nearly all have carious teeth and enlarged tonsils and adenoids.

Morphological measurements. Nine of the 18 are above average standing height, but only 5 are even up to average for sitting height. Seven are above average weight for

their age and height. In grip and lung capacity only 3 are up to average for their age.

Diagnosis. Nine of the 18 are undoubtedly feeble-minded. Of these 9, 1 is actually so unstable that he is best classified as insane. Two others are exceedingly psychopathic. One of these 2 is of a deteriorative type, is the oldest member of the group, and a congenital syphilitic. Four others are potentially feeble-minded, so far as present indications go. Of these 4, only 1 is an uncomplicated case of intellectual inferiority. The other 3 are not only inferior in level but the quality of their performance on various tests indicates a high degree of instability. Their behavior is not only a-social but anti-social. The other 5 cases are inferior in level but not sufficiently so to indicate that there is any high degree of probability that they are permanently retarded and will be feeble-minded later on. All 5 of these children are definitely psychopathic. The signs of their instability are numerous. Three of them are congenital syphilitics. All of the 5 came under observation because of behavior which made them impossible in the community. They set fires, are unmanageable, scream aloud in school, steal, and run away.

Generalizations. The 6-year-level group is not a highly complex one. Most of the cases are definitely abnormal. Their abnormality of behavior is obvious from the summary of their delinquencies. Their abnormality of performance on intelligence tests varies tremendously, yet there is not one thoroughly normal child in the group. They vary as greatly on concrete performance tests as on the Stanford and school tests. They are physically inferior and subject to anomalies of development.

The mere fact that a group which is so young can present so many and such varied social problems is evidence that we are dealing with more than mere intelligence inferiority. A careful analysis of the individual cases in

the light of the problems they present, even when under institutional supervision, indicates that they are a group that needs custodial care for many years at least. The most promising two are younger children who naturally have fairly high intelligence ratios. Both of these are handicapped by definite traits of a psychopathic nature which seem to indicate that they are but justifying their inheritance—both come from families with marked cases of psychoses needing hospital care, and these are in the direct line from which our cases are descended.

Our present institutions for the feeble-minded and delinquents fail to provide the type of care needed by at least half of this group. As a result, most of this not-feeble-minded group are being taken care of in boarding homes or under parole conditions in their own homes, with tremendous effort on the part of a large number of normal members of the community. Naturally, this type of care is but a temporary expedient, yet lack of proper facilities makes it almost a permanent drain upon all concerned. Our study of older delinquents, suffering from similar abnormalities and indulging in similar delinquencies, will prognose the future of this group better than any speculation could. However, the early age of disturbance in most of these individuals, the low learning level, the marked type of their disturbances, their general physical and neural inferiority, all indicate that there is very little hope of corrective or reëducative work being possible with this group.

Between 7 Years and 7 Years, 11 Months Mentally

The possession of a mentality of this level seems to be sufficient to make a child at least appear intelligent. As a result, most individuals hold him responsible for his behavior. A mental age of 7 is evidently sufficient to enable

its owner to imitate a great many of the behavior characteristics of normal boys and girls who are actually far more intelligent. The physical peculiarities that so often mark the imbecile are seldom apparent. Instead, the child presents to the judge, the social worker, and the teacher a problem of "moral depravity," "wilful misbehavior," or "weak will." In all, 42 of the 369 children studied scored at this level. Their ages ranged from 7 to 19 years, with 21 of the 42, either 8, 9, or 10 years old. Six boys and 2 girls are negroes and there is a mulatto girl.

I.Q. If one attempts to rate them according to intelligence quotients, the groups ranges from feeble-minded to average normal level, for the range of quotients is from 98 to 44. Here again, as in the 6-year-level group, there is no child who scores absolutely up to age or who has an intelligence quotient of 100.

Delinquency charges. This group really presents a complex problem. At least 32 of the 42 have multiple charges against them. Of the other 10, one was sent in for study in an attempt to avoid physical, mental, and behavior traits such as had developed in an older brother. Another was "too nervous for school." The other 8 were committed either under a general incorrigibility charge or because of one serious offense, such as rape. There seems to be no definite delinquency which belongs to this mental level alone or which characterizes it. There was a total of 75 charges against the 40 actually delinquent children. Fifteen of these were for incorrigibility or unmanageableness in some form. Eight lied pathologically, 17 were charged with stealing, 12 were truants. Nine were sex offenders, usually in some perverted fashion. Seven set fires. Besides this there are minor charges of cruelty, profanity, and viciousness. One thing we may be sure of from these data. A mentality of 7 years is sufficient, given the right conditions, to create a true delinquency which is dangerous to

the community. Moreover, the problem of handling these children in constructive fashion is not a simple one. Although these children are of a "7-year level," that rating bears but little therapeutic significance and does little to explain the problems they present. It is not the problem of the high-grade imbecile whom institutions assimilate into their routine of bed-making, floor-polishing, simple handwork, and dormitory living. It is not the problem of the second-grade school child as each teacher knows him. There are some feeble-minded individuals in the group, and these must be handled one way. There are normal-testing children who must have other methods, and there are the in-between group who are not simply backward or dull but also "vicious," unmanageable, and bad-tempered. There is evidently another factor besides mental age itself that provokes these symptoms.

School grades. We have mentioned the difference of the group from the average 7-year-old with his little well-ordered 7-year mind, going and coming as a member of the second-grade group in any school system. *These* children vary in school performance from first- to eighth-grade work. Two have not gotten beyond first grade, 16 are in second grade, 12 are in third grade, 6 are reported to be in fourth grade, whereas 1 is in fifth, 3 are in sixth, and 1 is in eighth grade. One has been in special class. Of course, this progress is definitely related to chronological age, but even then it is absurd to suppose that the ordinary 7- to 8-year mentality can do fourth- or fifth- or higher-grade work successfully. Again we find that the group is not doing or being what one would expect when he says "mentality—7 to 8 years."

Stanford range. In a way, analysis of the Stanford is unnecessary. The whole of our study of this group is an analysis of differences under the general Stanford classification of 7 years to 7 years, 11 months. But a great

deal of this is revealed by a study of the Stanford-Binet material itself. Eight have a basal year of 7 itself, 14 have a basal of 6, 12 fall to a basal of 5, 7 have a basal of 4, and 1 has a basal of 3 years. Only 3 of the children do tests above the tenth year. Each of these gains credit for one test in the twelfth year, 1 doing the similarities and 2 passing the pictures. Only 1 child does not do any tests above the eighth year. The average range above basal is 4.0 years.

Stanford distribution. Of the individual tests themselves several stand out as peculiarly difficult. Of those with a basal year below five, 5 fail on the patience puzzle, and only 3 on any other test. The repetition of the sentences in the 6-year group is far harder than any one other test having nearly twice as many failures as any other 6-year-level test. The diamond is the hardest in the 7-year group. The most spectacular failures are on the ball and field and the vocabulary in the eighth year. Either 17 or 18 out of the 42 succeed on each of the other 8-year-level tests. This indicates that there is a fair chance that success will accompany 1 out of each 2 trials of different children on these tests if the individuals score 7 to 8. The ball and field is done by only 10 out of 42 and the vocabulary test is passed by only 3 out of 42. Above this level the most marked failure is on the lifted weights.

Stanford quality. The diamonds exhibit peculiar twists, meandering endings, additional tremors, and patchings in 10 out of the 42 cases. The design and ball and field reflect this same tendency, which is by no means correlated with failure to pass the test. The quality of the action seen in the pictures is unusual in 6 cases. There are other individual findings just as marked, perhaps more so because of their lack of frequency.

Association distribution. The association test was given in 36 of the 42 cases. Three of the 36 failed in it because

of inability to comprehend the directions and adapt to the demands made. The other 33 gave more or less coöperation. However, only 6 of the 33 were able to give the whole 100 reactions without resorting to phrases. In almost all of the cases many of the responses are highly individual and do not occur in any norms. These individual responses range in frequency from 8 to 97 out of the 100 reactions. Common reactions are proportionately infrequent.

Association quality. Aside from the individuality of responses there are a number of qualitatively abnormal responses. These are present in 28 of the 33 cases. Perseveration, automatisms, repetition of the stimulus word, constant usage of the same reaction, and nonsense syllables occur again and again. These, with the exception of nonsense syllables, that is, neologisms, were not found in the responses of the 6-year-level cases. The children are too young mentally to be rated on this one test alone, but there is every reason for its use. Analysis reveals complexes, fears, habits of training, ignorances, and many other details, a knowledge of which is fundamental to a complete study of the individual, although they are not essentially a part of a classifying diagnosis.

Performance tests. On performance tests the same variability shows. The Seguin formboard gives an average mental age of 8.4 years with a mean variation of plus or minus 1.7 years. As a matter of fact, the group ranges in ability from an average 5-year-level to the 14-year-level time. The mode is a 7-year-level performance, 11 children scoring at about that rate. The general variability is greater than that reported by Sylvester for 7-year-old normal children, yet the number of cases is less.

The adaptation board gives an average age of 7.4 years. The mean variation is only .4 years although some children score as low as a 4-year-level. The mode is 8 years. Unfortunately, we lack a test with which to supplement the

adaptation test in the higher levels. Many and most tests involve adaptative learning, but they test it in relation to other, far more complicated mental processes than this test involves.

On the Knox imitation this group ranges from an average 5-year performance to a 15-year ability. The mode is a 10-year performance, and the average is 9.1 years. The average deviation is 2.4 years.

The Healy completion board gives an average mental age of 7.4 years with some children doing less well than the average 5-year-old and others scoring as high as adults. The mean variation is 1.8 years.

The Porteus reveals about the same situation. The performances for individual children range from 5 to 13 years, the average being 8 years, with a mean variation of 1.7 years. There is no actual mode! Exactly the same number of children score at the 5-, 7-, 8- and 9-year levels on this test.

School performance. Most of these children are too low in intelligence to score on educational tests other than reading. Nine of the 42 cannot read. Of the other 33, the average score is 9.9 points, or a 60 percentile rating for second grade. The mean variability is 4.9 points. The mode is 12 points which is almost average for third grade and is a rating reached by only 10 per cent of the usual second grade. Some of the scores range as high as 20 points, which is between fourth- and fifth-grade work. No child rates high enough to be considered above this grade. The boy who was said to have reached eighth grade does about fourth-grade work.

General information. Nine of the 42 had a range of practical knowledge which was surprisingly good for their mental level. The others had scanty, incomplete items to report and had gained but little from their everyday experiences.

Own story. Five could tell no story of their own behavior as it had led to their arrival at the Bureau. Fourteen gave brief but truthful and fairly accurate statements. The others ranged between these two extremes. In one instance delusions and folk superstition were firmly amalgamated. All varied more or less from the truth, usually more.

Behavior under observation. Their behavior was, to say the least, varied. One examination period was enough to show irritability, nerve tension, ease of distraction, apathy, grandiose ideas, or great depression in over half of them. One ran an acute monomania. In the cottages they were definite problems. They fought, lied, stole, ran away, proved generally incorrigible, even as in the community.

Medical findings. The physician's report on this group shows that it is comprised chiefly of constitutional inferiors. Eighteen of the 42 have some definite disturbance of the nervous system with increased or diminished reflexes. Speech defects, marked eye defects, stigmata of the skeletal system, and disturbances of the circulatory system occur again and again. Seven have positive Wassermanns, and 3 others are younger sibs of known syphilitics. Two others are marked definitely by one or more of the Hutchinson triad of syphilitic stigmata.

Morphological measurements. The group is surprisingly good in some respects. In standing height they average well up in the 60 percentile when compared with the Smedley norms.[2] In sitting height they are very variable but average only in the 30 percentile. Weight places them in

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[2] A percentile rating means that all individuals in the series have been arranged in order according to their measurement on that series, the lowest being ranked 0, the highest 100 per cent. A rating in the 60 percentile, or of 60 per cent, means that the group or individual measured scores as high as 60 per cent of the group with which he is compared. He ranks "average" if he scores 50 per cent.

the 50 percentile. In grips they rank in the 40 percentile but lung capacity rates them only 30 per cent.

Heredity. Undoubtedly inheritance plays an important part in the formation of this group. The family data gathered are too scanty to tell us the real significance, but, even so, they present the same mental pictures as are shown by these children.

Diagnoses. Six of the 42 are definitely feeble-minded. Their delinquencies are of less significance than those of the rest of the group, being running away, unmanageableness in a home which did not see the problem as it is, immorality and illegitimate children on the part of the girls. Eight other cases are of feeble-minded level but so erratic and unstable that they deserve the additional classificatory term, psychopathic. Another child is feeble-minded and so inferior in physical function that it is this aspect of his make-up which has made him a delinquent. He has a heart which is too bad for punishment by even a severe scolding to be advisable, yet he is delinquent in the extreme. Four others are of feeble-minded level, as unstable as the above group, but in addition to this they give indications of deterioration. They show remnants of ability at far higher levels than those at which they are now living. Whether they are now feeble-minded as a result of deterioration or whether they were true feeble-minded who have now reached a lower level because of this additional handicap, it is impossible to say, for neither history of earlier years nor the period of first observation is such that the differentiation can be made. Three others are of feeble-minded level and have definite psychoses. One indulged his mania for fires, set with a precision of detail which was the same each time, until the cost to the community was $91,000. Another is paranoid in type, and the third is seemingly a case of dementia præcox. Six others, because of the quality of their responses and the gen-

eral history, have been diagnosed as potentially feeble-minded. Three of these are markedly erratic, unstable, peculiar, different from the run of so-called feeble-minded. On 5 the diagnosis has been deferred. Another group of 6 are markedly inferior in intelligence level and are also psychopathic. In every instance their delinquencies place them in the group of the most serious offenders. Just what will become of them later it is hard to say, for they have not the stable usage of that mentality which is theirs, and behavior is apt to be very much dependent upon the chance effect of the environment. Two other children must be mentioned together and apart from the rest of the group. These two are brothers 13 and 10 years of age, of a known syphilitic parentage. The older brother has been diagnosed as a case of Marie's cerebellar ataxia. The disease has progressed to the point of almost complete inability to walk, with convulsive seizures many times a day, and all of the incidental dependence. Despite his physical handicap, this boy steals, so far as his opportunity permits, taking things from pockets. The younger brother is nervous and delicate, frail and fretful and fearful. He does not give any signs of abnormality to the chance observer, yet he shows the beginnings of all of the motor defects of the older brother and is "like the brother was at his age," according to the father. Both of the boys test at the 7-year level and do practically identical work on all tests given, considering, of course, that there are some tasks which the older brother can no longer perform. These cases are actually feeble-minded in present level, yet they have been normal. They are going backwards and so are not only unstable and not-to-be-counted-upon in type, but they are deteriorative. They are splendid illustrations of the inefficacy of the I.Q. per se as a diagnosis! There remains one other case at this level, this is one of the highest I.Q.'s and is a little girl diagnosed as a normal psychopath despite

the history of constant incorrigibility in one good home after another. She has had the advantage of every possible medical attention and of the best of educational chances. Observation a year later shows her still testing as normal, but developing her incorrigibility into a definite child hysteria, with simulation of illness, headache, disinterest, and over-affection.

Generalizations. One can hardly draw any conclusion from the study of such a group of cases. It is the comparison of the various groups with each other and the recorroboration of findings from various aspects which makes for finality of statements which must be true. Nevertheless this group does give us some indications of the problem we are approaching. It is not simple feeble-mindedness, nor simple environmental lack that picked these 42 children out of many thousand of the same mental level for commitment and study. There is another factor, the factor which we have recognized by the use of such descriptive terms as queer, different, erratic, and unreliable. On the tests this shows in the wide range of posible performances on a given test, the variability from test to test, and the fluctuation of other test ratings which are now up, now down, from the Stanford ascertainment. The extreme verbalism, with the poor performance on formal vocabulary tests, and yet with good comprehension of written forms, is one such fluctuation. On the association series it shows in the presence of symptoms that we recognize as definitely abnormal in older individuals. In the observation of these children while at the Bureau the instability showed in the frequent breaking away from any morale influence, in attempted escapes, in fights, sex episodes, grouches, tantrums, and perpetual renewal of discipline problems.

A mentality of 7 years means anything from feeble-mindedness to normal intelligence. It means, also, every

possible need from care in an institution for the feeble-minded, or care in a hospital for insane or epileptics, to parole, boarding, medical correction, psychoanalysis, and reëducation.

Between 8 Years and 8 Years, 11 Months Mentally

The group whose lowest limit of mentality is 8 years and 0 months is one that presents the beginnings of our real social problem. There are feeble-minded of this level in most institutions for the feeble-minded. There are also individuals with no more than this amount of intelligence who are getting along in the community without any special supervision. The feeble-minded of this level was about the highest type formerly recognized. The higher levels of institution cases are those which have been discovered by mental tests. We have, in consequence, reached the level where we may expect far more complication of findings and more open disagreement of data from the economic and behavior sides.

Age and sex. There were 43 children who scored mental ages between 8 years, 0 months and 8 years, 11 months. This group is composed of 33 boys and 10 girls. Three boys and 2 girls are of colored blood. All of the rest are American-born children, although of foreign parentage in 4 instances. The ages range from 7 years, 9 months to 16 years, 8 months. In general, the distribution throughout the various ages is rather regular. There were more children at the ages of 9 and 12 sent in than at any other ages. The average chronological age for the whole group was 12 years with a mean variation of 2 years, 3 months.

I.Q. The statement of chronological age variation gives its own intimation of intelligence-quotient variability. The I.Q.'s range from 50 to 110. There is, however, only one child whose I.Q. is up to or over 100, although there is

a group in the nineties. This boy, who rated 110, was definitely a social menace at the time of the first observation. Later examinations have shown a continued development of intelligence with no cessation of delinquency. He began running away from home and riding streetcars, begging for money to buy food when he wanted it. By the time of his examination, when 7 years, 9 months of age, he was a persistent beggar and truant from home and school, protecting himself from maximum punishments everywhere by his wit and attractive originality of blarney. Recently, when just past his tenth birthday and consequently old enough to be sent to an industrial school, he was sentenced there for stealing an automobile. Every type of persuasion, temporary imprisonment, punishment, reward, and correction has been tried, save taking him away from a weak-willed mother who gave only this simple history of the boy's origin, "I went with a man and he fooled me. He fooled another girl, too, but she was smarter than me and got him to marry her."

Delinquency charges. The charges against this group are multiple and varied. The definite offenses number 97 for the 43 children. Only 5 do not have more than a single charge against them. The outstanding offenses for this level are truancy from home and school, which was the trouble in 26 instances, and stealing or breaking and entering which occurred in 24 cases. These 2 offenses number over half of the reported difficulties and are, in almost every case, qualified by the descriptive term, "persistent." The next most frequent trouble comes from lying, which approximates false accusation in several cases and occurs in sufficiently serious fashion to make 11 children impossible in the community. Homosexual and perverted practices occur 4 times and immorality in 6 cases. Other offenses are practically individual and range all the way from threats to kill to extreme cruelty to other children,

destruction of railroad property, and incorrigibility. There is a certain relation of one or two offenses to the mental condition. The most marked homosexual is a feeble-minded psychopath; the definite cases of immorality are feeble-minded girls; the other perversions are deteriorative and psychopathic cases, all below normal level in intelligence rating.

School grades. The school ranking of these children is far more in accord with their mental age of 8 than the average chronological age of 12, although a brief glance at the following table shows that the actual situation is an unsatisfactory compromise of the two factors.

SCHOOL RANKING

Grade	Number in Grade
1	2
2	7
3	16
4	11
5	4
6	3

The greatest group are where they should be by mental age, or below. Some of our later analyses may help explain the 18 who are definitely in advance of what we would expect them to be doing for their mental age. These are mostly older children.

Stanford range. The basal year in most of these cases is about what one would expect. Twenty-four of the 43 have a basal of 7 years. Ten have a basal of 6, 4 have a basal of 5, 2 go back to the fourth year, and 3 have a basal of 8 years. The number of years above the basal through which successes are scored ranges from 2 to 8. The greatest number, 19, have a range of 3 years, although the average range is 4 years, with a mean variation of 1.2 years. Three children pass a test in the fourteenth year.

Stanford distribution. An analysis of the individual tests on the Stanford is illuminating. The cause of a basal

year of 4 in 2 individuals was failure to do the three commissions in one case and inability to name the colors in the other. A basal year of 5 resulted from failures on all tests in the sixth year in about the same proportion, except that none failed on naming coins. The hardest test in the seventh year is the diamond; 6 out of 40 fail on this although it is well below their actual level and their chronological age. None fails on giving the number of fingers on the hands or in giving action in the pictures but there are 2 or more failures on all other tests. In the 8-year-level group, again, none of the children fail on naming coins, but there are failures on all of the regular tests in this group. The vocabulary test is the hardest, for 26 of 40 fail on it. Seventeen out of 40 fail on the ball and field and on the similarities, the failures on the other tests being much fewer. In the ninth year the reversed digits is the hardest, the rhymes next. The weights is next hardest, but they are passed by 73 per cent of the children. The 10-year vocabulary is passed by only 1 child, the comprehension by only 7, the absurdities by 10, and the design by 12. The 12-year tests are entirely too hard for this level, although a few successes are scored on all tests at this age except the vocabulary, the abstract terms, and the fables. Three children out of 18 succeed on the repetition of 7 digits in the fourteenth year level but fail with the others on all other tests.

Stanford quality. Seventeen of the 43 children show peculiar traits when one investigates the individual test reactions. Perhaps the most striking instances of this are the drawing tests. Twelve of the group show erratic and peculiar completion of the diamond, 5 show familiar deviations on the design, and there are some like interpolations on the ball and field. Nonsense syllables frequently appear in the rhyming. Reaction times are delayed in some instances. Negativisms are found in a case testing

normal. Forgetting the aufgabe before the test can be done also appears.

Association distribution. Only 34 of the 43 children are able to understand what was wanted well enough to coöperate and complete the test. This is no better than the percentage of 7-year-level cases succeeding. Of those who fail, some can give no adequate response, whereas others try repeating what the examiner gives, and one of this group found the happy solution of giving the plurals of each stimulus word as his reaction word. Of the 34 who could adapt to the test, there are only 11 who did not give some phrases, that is, 23 of 34 answer with some phrases. The number of phrase reactions ranges from 1 to 70, with an average number of 10 and a mean variation of 13. The number of individual words given varies from 5 to 93, with an average number of 27.5 and a mean variation of 13.8. Of course, the number of common reactions varies in reverse proportion to the number of phrases and individual reactions given.

Association quality. Of the 43, we may well count the reactions of the 9 who cannot coöperate and pass the test as abnormal. They are a minority of inadaptives even in this selected group. No analysis by age, sex, color, or other known attribute explains the reason for their failure. Of the other 34 who adapt to the test, 29 give some sort of pathological reaction. The reactions are extremely slow in 20 per cent of the cases. Perseverative reactions occur frequently. One individual uses *nice* as a reaction 37 times and *good* 36 times. Another uses *good* 27 times and *big* 22 times. Another replies by neologisms in 96 instances out of 100. Another answers by such words as *one, the, it.* This is a conscientious picture of his lack of associative ability. One can almost see the emptiness of thought that makes him give the bits of words which he has had drilled in so constantly in school.

Performance tests. The Seguin formboard shows a range of performance rating from 7 to 13 years. The average performance places this group at about 9.7 years with a mean variation of 1.3 years. The modal score is 11 years and the median 10. There is some slight indication that more of the higher scores tend to be made by the older children. The exceptions to this are numerous.

The imitation series gives a range in score of from 7 to 17 years. The mode and median scores are 10 years, but the average is 11.4 years, with a mean variation of 3.1 years. There is no evidence that increased age increases this performance rating, for the extreme value of 16 years is scored by a 7-year-old and the highest value, 17 years, was scored by a 10-year-old. Nor is there any reverse relation evident.

The Goddard adaptation series rates the group from 5 to 8 years. The greater number of the group, 32 out of the 43, pass with an 8-year score. This makes the failures of the others more significant. The lowest score is made by only 1 child and a score of 6 by only 2. Significantly, the 2 that score at 6 years are known syphilitics, and the score at 5 years is a suspect on whom the data is insufficient to confirm the suspicion.

The Porteus was given to only 26 of the whole group. These range in score from 5 years to 12.5 years. The average performance is 9.2 years. There is a mean variation of only 1.3 years. The mode of performance is an 11-year score.

The Healy pictorial completion shows a variability of scores which range from a 5-year to a 15-year level. The mode and median scores are 8 years, but the average is only 7.6 years, with a mean variation of 1.8 years.

School performance. On the Ohio literacy test the individual scores range from —1 to 24. The mode of performance brings a score of between 11 and 15 points, with a

median of 14 points. The average is 13 points, with a mean variation of 4.8 points. A score of 13 is exactly median for third-grade school work, and is 60 percentile for 8-year-old children. According to this, the group average is normal, but the variants reach all scores from low first-grade failure to a median score for sixth grade. The highest scores are not made by children who have reached that high a grade but by younger members of the group in second and fourth grades. The score on this test is the number right minus the number wrong. In the directions the child is told to skip any individual test he does not know and *not* to guess. The inspection of some 10,000 records indicates that the normal child obeys this direction fairly well. In this group the percentage of error is very high, ranging from 0 to 60 per cent, with a mode of 10 to 20 per cent and an average of 18.3 per cent. The mean variation is 9.6 per cent of errors. This is an indication of probable instability in the delinquents.

On arithmetic tests 23 per cent cannot do more than the counting and writing of numbers demanded of first-grade children, 62 per cent can do second-grade work, 15 per cent do about third-grade work.

The spelling rates them at all levels from first to sixth grades. Only a very few, about 15 per cent, do more than fourth-grade spelling. Again ability does not definitely relate to the grade gained.

On formal language work none of them can do more than the simple sentence formation demanded of second-grade children save 2 girls, aged 12 and 16, who do fair fourth-grade work. These are both psychopaths.

None of the children in this group accomplishes anything in geography.

General information. In this aspect of their ability the group ranges all the way from sheer stupidity to the precocious forcing of information which intimacy with

street life in a big city often gives. At one extreme there is a girl of 16, who has been immoral and has an illegitimate child, from whom it is almost impossible to obtain any data on even her own experiences, although she tried conscientiously to give what was wanted. She cannot remember and is deoriented for time relation of events and deals in so much circumlocution that one makes no headway in the general search for information. On the other extreme is a 12-year-old girl who knows every sort of life, who describes in good, coherent English her experiences on runaway trips where she has sold flowers, sung for money, made her way about restaurants, evaded the ways of the law, and in general managed her own wilful affairs with more than ordinary prudence and foresight. So far as knowledge of the human qualities of other individuals goes, trust the psychology of the wandering delinquent! Twenty-one per cent of the group show some pathological symptom in this aspect of their examination.

Own story. The general quality of their stories may almost be described in the phrases used to describe their general information. Twenty-seven per cent of the stories show incoherence, deorientation, or monomaniacal ideas in such a way that one feels the child is abnormal. Of course, the tales are rather brief in one way, diffuse in another, but this is a general characteristic of the group at that level, so far as we know. However, when a child enlarges being kept sitting in a seat in school after hours until a probation officer comes for him into a tale of being beaten, gagged, and tied with a rope, one has a pretty definite margin of safety in assuming that, granted he knows what he is telling and the reason, there is some abnormality in his mental condition.

Behavior under observation. Forty-two per cent of the group showed some abnormality of behavior during the psychological examination. Overtension, exaggerated

statements, ignoring of test conditions, irrelevance of conversation, delayed reactions, initial delay on comprehending tests, melancholia and crying, and many other minor symptoms are numerous. Masturbation was noted in several cases. The cottage life of these individuals was about the same as that of the 7-year-level group.

Medical findings. It would take an analysis of many pages to enumerate in their proper relationship to each other all of the physical abnormalities found in this group. Eleven of the 43 have positive Wassermanns. Eight of the 11 bear marked stigmata of this condition in eyes or teeth or skeleton. Fifteen suffer from definite disturbances of the central nervous system such as would be indicated by exaggeration, or absence, of the deep reflexes. Two show fundus indications of syphilis. Nine have a definitely positive Romberg. Six, at least, have enlarged glands. Knockknees, round shoulders, scoliosis, scaphoid scapulæ, and flat feet are common. Hearing is impaired in 2 cases, teeth need attention in almost all, eyes need refraction in many instances. Two are probably epileptics.

Morphological measurements. The anthropometric findings are rather interesting. Arranging the group in order, according to their percentile rating on the Smedley norms, shows that they are comparatively tall in standing height. Fifty per cent score over 70 on the percentiles. In sitting height they are lower. Only 12 per cent score as high as 70, and over 40 per cent score below 20 per cent on the norms. This may be an indication of retarded physiological development. Nor is malnutrition a general problem, for 50 per cent score at least 70 in weight. The right grip shows 70 per cent of the group scoring at least 50 per cent, and this holds good for left-hand grip. Lung capacity evidently tests a more complex function, for, although there are 50 per cent scoring 50 or over, there are also 38 per cent scoring less than 20 per cent. Evidently, the group does

not fit into the picture which Doll gives of feeble-minded individuals.[8]

Heredity. Although in general no extensive investigation of families was possible in this study, yet the indications from what has been gathered are that the children at the Bureau are not showing, in their delinquencies, a new or unknown aspect of the families from which they come. Five families are type cases of inherited feeble-mindedness. In 2 cases there is epilepsy, insanity is present in 3, alcoholism in 4, criminality in 2, deteriorated conditions in 2, immorality in 3, syphilitic infection in at least 5, not counting direct infections of the 13 children whom we know to be syphilitic. The families of 9 children are inferior, 5 being foreign to this country. Other conditions, such as divorce, desertion, cruelty, illegitimacy, unwillingness to work, play their part, and there is only one family of the 43 that is definitely known to be normal.

Diagnoses. Three of the 43 individuals are feeble-minded. In general, they have fewer offenses than the other individuals. They are in for immorality, stealing, and truancy respectively. There are 11 other feeble-minded individuals who are also psychopathic. These are not only inferior on intelligence-level ratings, but there are indications of their functional disturbances also. They are incorrigible, violent, sullen. It is from this group the grossest crimes are reported—rape, profanity, forging, vulgarity of every type, wandering, incorrigibility. This group of 11 are all older than the average. All except 1 of them are over 13 years of age, and that one is 12. There are also 5 other feeble-minded individuals who are psychopathic, and in whom the problem is definitely complicated by the presence of congenital syphilis. Of these, the youngest is 12 years of age. They, too, are major offenders, more given to temper and other periodic episodes than the not-known-

[8] Edgar A. Doll, *Clinical Studies in Feeble-Mindedness.*

to-be-syphilitic group. One feeble-minded psychopath who is syphilitic should be mentioned separately; there is an additional factor in this case, for in him definite indications of deterioration have made their appearance. Three younger individuals are much like the feeble-minded group but are too young for the intelligence retardation which they have to definitely rate them as feeble-minded. They are potentially feeble-minded. These three are liars and thieves. One other potentially feeble-minded individual is a psychopath and has been a constant community problem for several years. He has 5 charges against him.

There is a group of 8 inferior individuals who are also psychopathic. There are 3 congenital syphilitics in this group. The sum total of examinations and observations on this group are insufficient to enable us to determine whether they are going to be more deficient and end as high-grade feeble-minded individuals, or whether they are going to be just inferior enough to be a drag on the community and yet avoid institutional commitment. One other individual is inferior, but the sum total of the indications of his condition leads us to classify him as an inferior normal who is psychopathic. Diagnosis is deferred on 5 cases. Three of these are retarded somewhat and are also syphilitic. One hesitates to say what the presence of that disease may, or may not, do to handicap their development. One other is deferred because of handicapping home conditions, another because he is a negro, and there seems a possibility of his measuring up to the norms of his race. Besides these, the group contains an inferior normal boy who suffered from a general neuro-muscular deterioration and who has since died from this condition (his crime of rape fits into the picture of his deterioration); a mental deterioration case in whom mental age is becoming progressively lower as she grows older; a child who tests normal in level

but who is undoubtedly a predement with paranoid attitudes, ideas and behavior, not yielding to analysis; a normal psychopathic girl who has a well marked tendency toward hysteria; a bright normal psychopathic mentioned above. These complete the group.

Generalizations. Just what does the data presented on this 8-year-level group teach us? To begin with, although it is nearly 4 years since the first corrective work was done on any of this group there is, so far, not one member of this group who has made good for a long enough time to be called a cured case. Some of the more recent releases are making good but those handled first have resolved themselves into chronic problems. Eight years of mentality is too low a mental age to make good in the community if there is any additional handicap, and once the habit of abnormal behavior is started, the intelligence is too low to easily break its tendency and establish a new habit, even with marked external incentives. The 8-year-level offender whose 8-year-level mental age is a sign of marked retardation is in all probability a candidate for continued supervision and institutional care. How much may be done for supervised paroling of such individuals after they have had a long and thorough period of corrective training into habits of work, and no chance for delinquency, it would be impossible to say. The problem is not a hopeful one.

This does not mean that all delinquents testing at an 8-year-level are hopeless. The children in this group are a selected group, an *n*th degree of delinquency. The significance is rather this: the more serious delinquencies met in any court are the acts of boys and girls who are sorely in need of expert care and prolonged supervision. A court hearing, a reprimand, probation, a suspended sentence, a year in an industrial school cannot even touch the cause of their behavior—they are mental problems in need of definite, intensive, prolonged, careful rebuilding of their whole

manner of living, thinking, and doing, combined with the utmost medical hygiene can do to make them fit.

Between 9 Years and 9 Years, 11 Months Mentally

In this group of children whose mentality is indicated by a general level of from 9 to almost 10 we have a problem of even greater social interest than in any of the groups previously discussed. Here, for the first time, there seem to appear cases whom one may definitely hope to save for normal social lives, without the doubt of unnumbered years of mere experimental attempts. Needless to say, the increasing endowment of each group adds to the probable variations to be found in that group, and the 9-year-level group is no exception to this general tendency.

Age and sex. The ages of the group range from 8 to 18. The average age is 13 years, 8 months, with modes at 14 and 15. The ages of 12, 13, and 16 are about equally represented, and out of a total group of 61, there are 12 who are less than 11 years of age. There are 5 negroes in the group, all of them being males. In general, the group consists of 37 males and 24 females. The distributions in age are similar for the two with the exception that there are 9 girls in the group who are 16 years or over and only 2 boys as old. This is a general feature in the selection of cases sent to the Bureau. The older boys were regarded as more definitely in need of correctional care and were far more frequently sent directly to reformatories or the industrial schools. The girls were considered more of a social problem, and the Bureau was given a chance to study, if not to solve, their needs.

I.Q. The intelligence quotients of the group range from 56 to 107, with a median of 64. Such a low median is, of course, the mathematical indication of the fact just pointed out, the large group of social problems over the age of 16.

There are 18 out of the 61 who have an intelligence quotient of 75 or over, but only 4 of these reach 100.

Delinquency charges. In all, there is a total of 147 charges against the 61 children. This is by no means a true picture of the problem they have been to society. It is rather a picture of the extent to which their behavior has been so impressed upon the judges and the court officers that the offenses have been recorded on the actual commitment paper. In many instances the accompanying history sheet adds details that double the seriousness of the situation. One cannot begin recording and calculating these in any definite manner, however. They are so variable in fullness and explicitness for even different children handled in the same court that they muddle rather than clarify our concept of the situation. It is well to remember, however, that stealing in these cases seldom means a single court offense, but more likely a continuation of thefts during several years. Truancy, incorrigibility, or any of the other more common charges is a word picture summing up months and years of ineffectual attempts to check the condition. Thirty-two of the 61 were charged with truancy from school or home or both. The absences vary from a part day at a time to prolonged periods of tramping and wandering. Twenty-nine were thieves. Eighteen were heterosexually or homosexually immoral, the homosexual cases being all males. Nineteen of the children lied to such an extent that it was a definitely important factor in handling them, one case bringing false accusations. Sixteen were designated as generally incorrigible. The other delinquency charges involve destructiveness, profanity, setting fires, temper spells, cruelty, laziness, attempted suicide, and recognized "nervousness" as the basis of poor conduct.

School grades. The history as obtained shows that the school grade reached ranges from second to eighth. The

average number of school grades completed is 4.5, with a mode and median of 4 grades. Only 2 have a history of reaching seventh grade and 2 of finishing eighth-grade work. All 4 of these cases are girls who have definite histories of having, at an earlier period, been more responsible and "brighter" than they now appear.

Stanford range. In 5 instances these children who test but a little more than 9 years of age had a basal of 9 with full success on all tests below that age. One of these did no tests beyond the tenth year, 3 completed tests in the twelfth year, and 1 scored as high as the 14-year level. This last individual is chronologically much older than the other 4. Twenty-one have a basal of 8, with a range through 10 in 9 instances, through 12 in 10 instances, and through 14 in the other 2 cases. All of the rest save 8 have basals of 7. These 8 fall back to basals of 6. One of this group is the only one who scores a success above the 14-year level, and he scores a success in the eighteenth year. This makes a total range of scattered successes through 12 years above his basal year. He is one of the children formally testing normal, *but* he is slow in school, queer and solitary, getting into trouble for minor delinquencies, physically fairly well developed but a known congenital syphilitic. The ranges above basal year average 4.3 years for the group. The modal range is 5 years above the basal, and the median range is 4 years.

Stanford distribution. The easiest tests that this group misses are the repetition of the digits in the seventh year, which is failed 4 times, the diamond, which is failed twice, the description of pictures in terms of action, which is failed twice. Those with a basal of 7 fail most frequently on the ball and field in the eighth year, and next in difficulty seems to be the vocabulary test. The comprehension series is almost as frequently failed upon. None of the other tests is failed more than half as frequently. In

the tests of the 9-year level the weights, the repetition of digits backwards and the rhymes are by far the hardest. The 10-year group of difficulties corroborates the difficulties at the lower levels, the vocabulary, design, and comprehension tests being missed most frequently. Above this age the easiest tests stand out best. The interpretation of pictures in the twelfth year, the induction, clock problems, difference between president and king, repetition of digits, the fables, and the cut design are each passed by 1 or 2 children. No child passes more than 1 of the tests above the 12-year level.

Stanford quality. Here again, as at the lower levels, the inspection of quality is easiest and, consequently, is most accurately rated on the drawing tests. Twenty-one of these individuals who score at least 9 years mentally are unable to complete the diamond without peculiar idiosyncrasies cropping out. They overlap corners, add extra side lines, are unable to get a line that does not wave irregularly or show fine tremors. In only 2 instances was the actual eye-hand coördination too poor to give a diamond which deserved credit so far as form goes. In the same way the design shows even more marked disturbances in 24 cases out of the 61. There are only one or two marked abnormalities on the ball and field. Delayed reactions, unrelated interpolations, erratic additions to verbal test findings occur in at least 25 per cent of the cases.

Association distribution. All children of this level were able to complete the test. Despite the aufgabe to the contrary, phrases appear in the reactions in 69 per cent of the cases. They range in frequency from 0 to 86 out of the 100 reactions. However, only 7 of the 61 cases give more than 10 phrase reactions, the average number for the group being 7, with a high variability. The mode is 0 phrases, and the median is only 1 phrase. The number of individual reactions is highly variable, ranging from 4 to 100. The

average number is 22, with a mean variation of 14 and a median of 16.

Association quality. At least 37 of the 61 give one or more abnormal reactions, and there are doubtful qualities in the responses of 7 others. In 13 instances the reactions were markedly delayed. One case averaged a reaction time of 12 seconds and 5 others averaged a reaction time of 10 seconds. Perseverations, automatisms, and negativisms occurred. The most frequently noted deviation was the use of a superficial reaction, something suggested by a chance sound, a recent experience, an object in one of the rooms the case had come through.

Performance tests. The performance of this group on the Seguin formboard ranges from the average score for an 8-year-old to the average 14-year level time. The average gives them a rating of 10.7 years, or a year higher than their Stanford rating. The median score on the test gives a 10-year rating, with the mode at an 11-year rating. There is no indication that the higher rating is apt to be made by the older children, for division according to age gives exactly the same average for the younger and older halves of the group.

On the imitation series they range in score from 6 to 17 years. The average score is 11.9 years, with a mean variation of 2.3 years. Even the lower extreme of the mean variable leaves a rating as high as the group's Stanford rating! The median performance is 10 years, but the mode is 14 years. On this test there is some slight indication that the older children tend to score more highly.

The Goddard adaptation series, although having an upper limit of 8 years, is applicable to this 9-year-level group. One child scores only the 4-year-level move. Two score 5 years, 3 score 6, and 13 score only 7 years. This gives the group an average rating of 7.5 years, although the mode and median performance are, of course, both 8 years.

The Porteus was given to 41 of the group. The ratings range from 5 to 13.5 years. The average performance is 9 years, 7 months with a mean variation of 1 year 5 months, which coincides more closely with the Stanford mental age than any of the other performance test ratings. The median is 9.5 years, and the mode of performance is 9 years. This is poorer work, when one considers their higher mental level, than that of the 8-year-level group. The mode of performance is lower by 2 years. Undoubtedly this means that the Porteus reveals some other capacity than one which we should assume an individual has by virtue of his mental age and chronological development. These children average a year higher mentally and are 1 year, 8 months older in average chronological age than the 8-year mentalities, yet they score an average rating only 5 months higher, and the modality is lowered.

The Healy board shows a variability of scores ranging from failure to 15 years, with an average mental age on the successes of 8.4 years and a mean variation of 2 years. The mode and median scores are both 8 years. On this test, again, the group as a whole is nearer what the 8-year level did than one could rightly expect. The modes and medians are the same, the average is 0.8 year higher, and the variability is greater in the 9-year-level children.

School performance. On the Ohio literacy test the scores range from 5 to 29. The modal performance is a score of 16 to 20. The median score is 20. The average is 19, with a mean variation of only 4.2 points. The average and median scores are about right for fourth-grade performance. Of course, the individual scores vary tremendously, ranging from inferior first-grade to average eighth-grade. The percentages of inaccuracy are lower than with the 8-year-level children, the average error being 12 per cent, with a mean variation of 7 per cent. The individual inaccuracies range all the way from 0 to 40 per cent.

In arithmetic, several children can do nothing at all. Seven per cent do fairly good fourth-grade work. The mode of success is a completion of second-grade work, 53 per cent accomplishing that. Third-grade work is done by 31 per cent.

In spelling, the variability of the memorial aptitude of these children becomes more apparent. They range in grading from first to eighth grade with a mode and median of fourth-grade ability, but with 36 per cent doing sixth-grade work or better.

In language, they are definitely low. They may speak well, even glibly, but formal application of such verbal ability is poor. Fifty per cent do about average third-grade work, and 21 per cent do less than that. None does over sixth-grade work, but there are 8 per cent of the children who can do good work on the formal grammatical requirements of sixth grade.

In geography, they have no actual orientation save to the simple problems of physical geography which are taught in story fashion to lower-grade children.

General information. The greater part of this group have only that small bundle of facts and practical understanding of affairs which would classify a child of 8 or 9 as normal. They know their own affairs fairly well and sometimes can give a number of parrotlike observations on matters of greater importance. In general, however, they show the same lack of perspective and comprehension for things beyond their ordinary experience as the 8-year-level group. There are marked exceptions, however. The younger children are better informed, talk more coherently, have a wider range of general knowledge and, in some instances, show marked superiority. Several boys in their teens seem absolutely normal in this respect, and it takes one's experience and belief in tests to demonstrate, after painstaking research, that the superiority in this ability,

rather than the inferiority in other lines, is the deviating symptom.

Own story. The stories told by this group are far more interesting than those of the lower mental levels. They begin to have a coherence that is lacking in the items given by younger children. There is still very little relating of cause to effect and no use of a logical order of happenings. There is naturally a slighting of the personal aspect of responsibility in the troubles which have come the narrator's way. But when one questions, this group can give clear pictures of their past, their homes, their own daily lives. They know things in a more detailed and exact way. Of course, there are definite exceptions, and some cases are almost completely deoriented or else lie with such fabrication that none of their statements means anything.

Behavior under observation. Twenty-one of the 61 showed signs of peculiar behavior while under examination. In 4 other cases the behavior might have been interpreted that way, but the basis for such assumption is not absolutely certain. The 21 showed extreme nervousness, inability to sit still and attend for even a brief time to the test conditions, hysteria to the point of laughing and crying, extreme desire for petting, moodiness, automatisms, weeping, depression, and apathy with sitting staring into space. This group yields far more readily to morale work while under residence.

Medical findings. These children give a composite picture of physical inferiority, at least in functional ability. Eighteen of the 61 are congenital syphilitics, with positive laboratory findings. At least 2 others have definite stigmata, and there are 3 other suspects, unproven. Twenty-nine of the 61 have some disturbance of the reflex arcs. Two have gonorrhea. There are indications of rachitis, scaphoid scapulæ, scoliosis, or other structural anomalies in 40 cases. Glandular changes are definitely present in 8.

Three have had some sort of "spells" in chronic fashion. Many have poor eyes, poor teeth, poor hearing, hernias, malformed toes, and other marked handicaps of like nature.

Morphological findings. On the Smedley norms this group shows up as above the average in standing height. Fifty per cent score above the 60 percentile, whereas 25 per cent score above the 90 percentile. There is not a double mode or distribution. Only 5 per cent score in the lowest decile. On the other hand, the group is low in sitting height. They are not so low as the 8-year group, for 30 per cent score 60 per cent or over, but 18 per cent score in the lowest decile. This distribution is a double one. In weight, the group again scores high. Less than the expected number, for a regular distribution of the group, appear in the 10 and 20 percentiles. Little excess appears at any point of the distribution until we reach the 50 percentile, which has the normal number. There are 38 per cent of our group who score above 70 per cent in weight. The grip ratings place them below average, between the 30 and 40 percentile in right grip and about 40 in left grip. Lung capacity averages about 50 per cent, with heavy groupings at both extremes, over 15 per cent falling in the lowest and also in the highest decile. This is not a picture of a straight, unmixed group, but of inferiors and normals mingled, with a great number of variants.

Heredity. There are 4 families in this group in which there is no reason why we should doubt the normal quality of the members on both sides. Five families show hereditary feeble-mindedness, 4 show insanity, 2 show epilepsy, 5, alcoholism, and 5, criminality. At least 19 other families have definite indications of hereditary neuropathic traits. Seventeen families are absolutely unknown; the children are adopted or state wards or are in minor institutions in some county. Other deteriorative traits, illegitimacy,

tuberculosis, paralysis, inferiority, shiftlessness, and the like appear throughout the picture.

Diagnoses. Nine of this group of 61 are definitely morons. Of these, 5 are girls who were sent in for being immoral. Immorality is feared for another. One other, a boy, is a persistent masturbator and teaches other children this habit. Two others of the 9 were sent in because of stealing. Sixteen others are undoubtedly feeble-minded, but they are also psychopathic. They are "wild, queer, profane, abusive, violent." They are homosexual, attempt assaults, refuse to work, run, steal, and lie. Seven others are not only feeble-minded psychopaths, but they are congenital syphilitics. They seem to be a group similar to the above-mentioned group of feeble-minded psychopaths but are more definitely delinquent and yield a higher percentage of sex cases. All of these psychopaths tend to be institutional problems until they have been assimilated into the routine of the institution. There is also one feeble-minded psychopath who is an epileptic and another who is feeble-minded, a psychopath, and whose psychopathy takes the form of psychic equivalents of epilepsy. In these spells he has extreme temper spells and prolonged fugues. One other individual of feeble-minded level *now* is definitely insane, and, as no history can be obtained save that he has wandered from place to place for some years, it is impossible to tell what his early condition may have been. There are three very inferior psychopaths. They are chronic delinquents with many offenses against them. Just what there may be in them for future development it is hard to say, but all 3 are definitely in need of prolonged custodial care and training. One of the 3, an adopted child who has been given every advantage was found to be a congenital syphilitic giving a 4+ Wassermann. There are 10 cases on whom diagnosis is actually deferred. One of these is backward, but he is a psychopathic child who, until the last year, has had con-

vulsions, and who now for the first time is free from their constant handicap. Five others are slightly inferior but are too young to be definitely diagnosed. Their difficulties seem to be largely a matter of getting the right handling for them. Four others are normal in level and psychopathic, but are likewise hopeful cases for reëducation. All but 2 of this group of 10 have been improving under careful handling, physical correction of defects, good supervision, and regular schooling. Two inferior psychopaths were actually psychopathic to the extent of having definite psychoses. There are 9 other children, normal or slightly inferior in level, who are congenital syphilitics. All of these have been under treatment. Three of them are making good in the community, the others have become more difficult to handle as adolescence has developed. One other child who tested normal gave marked evidence of physical deterioration. Treatment has seemed to check this and has brought general improvement. One other normal psychopath has developed epileptic equivalents, fugues, and spells of amnesia which are now approximating a mild psychosis. He gives negative findings, but history definitely places him as a third-generation syphilitic.

Generalizations. Evidently a mentality of 9 is not only sufficient to get into trouble but also sufficient to render reëducation possible. The children who come into court and test at a 9-year level will present many types of problems. They will be diseased in a goodly part of the instances, they will need physical correction frequently, about 30 per cent will need custodial care indefinitely, another 10 or 20 per cent might well have such care. On the other hand, immediateness of understanding may well send a good percentage of them back for local handling. The question of treatment, of hopefulness, or hopelessness, of their future is not entirely a one-sided thing. The chief fact to be stressed is that the putting of any of these chil-

dren on their feet is not a matter of a few days, but of weeks, and months, and even years, and then one may fail. After any length of time a child may well prove unable to maintain self-control, may fall back into being a social problem. Again, cases for whom there is no definite place in the state system may well be handled by intermittent home and institutional care, the institutional care being according to immediate need and urgency. This can well be done when parents or guardians are of sufficiently high level to be taught to coöperate. The 9-year-level group brings us real deteriorates, real psychoses, real criminals, hopeless material of all sorts, as well as those with whom one can work optimistically.

CHAPTER XVI

CHILDREN TEN TO TWELVE MENTALLY

It is almost useless to go on describing the various attributes of the individual age groups, so far as it will give, or may be expected to give, any help in the handling of an individual case. The description shows some of the various possibilities of the children at each or any age, but it is far from being a guide to simplification of diagnosis. Indeed, the whole purpose of presenting the many variations of the groups from so many different angles is just that: to show the need for the extension of work with individuals and with groups, since diagnosis is a matter of knowing all possibilities and picking out the right one. Because of this, it is worth while to have at least a general concept of the possibilities that one may meet at any one age.

Between 10 Years and 10 Years, 11 Months Mentally

The children in this group range in age from 10 to 19 years, with an average of 14 years, 5 months. The modal age is 13, and the median is 14 years, 2 months. There are 61 children in all, 40 boys and 21 girls. The age distributions of the two are not at all alike. There are only 2 girls under 13 years of age in the group, whereas there are 14 boys. The older groups are practically equal in number at the various ages. This actually means that, in relation to the total number committed, there are twice as many girls sent to the Bureau in the later years of adolescence as there are boys. There are 4 colored children in the group, boys of 11 and 13, and girls 13 and 15, respectively.

I.Q. The intelligence quotients of the group cannot, of course, run below 63. As a matter of fact, the range is from 63 to 107. There are only 3 children who score an I.Q. of 100 or more and only 3 who have intelligence quotients in the nineties. A conclusion that because of low I.Q.'s a large part of the group is feeble-minded would not be correct, however, unless certain additions and reservations were made. The group is inferior, in many instances, to the level of feeble-mindedness, but there are other factors to be considered and many of them.

Delinquency charges. There are a total of 153 charges against the group of 61 children. Twenty-nine are accused of incorrigibility, 29 steal, 27 are truant from home or school or both, 20 are sex offenders, 8 being markedly homosexual. There are 6 who have attempted murder or suicide. Sixteen are problems because of lying. There are a minor number of charges of violence, cruelty, extremely bad temper, profanity, setting fires, destructiveness, and the like.

School grades. The school grade reached ranges from third to ninth. The average number of grades completed is 5.6, with a mean variation of 1 grade. The mode and median achievements are both 5 grades. One individual of the 61 has not been in regular grades but in a special class, without grading being given him.

Stanford range. The range is naturally dependent in part upon the height of the basal achieved by each individual. The basals for this group range from 6 to 10, only one individual having a 10-year basal. The mode and the median achievements are a basal of 8 years. The range above basal varies from 2 to 11 years. The average range is 6.3 years. This is greater than the average range of the lower mental levels and seems to indicate that, although this group has increased ability to do higher tests, it does not, in proportionate fashion, eliminate failures on the lower years, for only through low-level failures can range

increase markedly. The mode and median ranges are both 6 years. There are only 11 individuals that have a range of 4 years or less, and only 5 that have a range of 3 years or less.

Stanford distribution. A similarity of distribution may be noted if we compare this mental-age group with the younger groups. Of course, in general, the failures are at higher levels. Those who go back to a basal of 6 years fail either on the repetition of 5 digits, drawing the diamond, or tying a bow-knot. Those who have a basal of 7 fail in the eighth year, on the ball and field in most instances, 9 out of 52 failing on this test, whereas not more than 5 fail on any one other test. The vocabulary and the comprehension of practical questions come next in difficulty. In the 9-year-level group the rhymes are by far the most difficult task. This is a significant failure, for the percentage of failures is as high as it was in the 9-year-level group, although decidedly lower than for the 8-year-level group. The reversed giving of 4 digits comes next in difficulty, and the lifted weights and the date are next. In the 10-year level the same type of failures are markedly most common, namely, the repetition of 6 digits forwards, the vocabulary test, and the reproduction of the design. In the 12-year level, vocabulary tests, both for the vocabulary list and for the definitions of abstract terms, are most difficult and the reversal of digits comes next. The interpretation of emotional situations in the pictures is by far the easiest. The vocabulary, digits forwards or reversed, and comprehension tests are hardest in the upper levels, although several children succeed in the repetition of 8 digits. The most frequent success in the eighteenth year is the correct reproduction of the cut design.

Stanford quality. The tests show about the same peculiarities as those reported in the 8- and 9-year-level groups. There is the same type of difficulty with the quality of

handwork in drawing the diamond, the design, and the ball and field. More elaboration seems to appear in the designs than at the lower levels. The diamond is erratically done by 46 per cent of the 37 to whom it was given. Only 2, however, are so poor in the form used that they do not get credit for the test. The design is peculiarly done by 25 per cent and the ball and field by about 15 per cent. The rhymes show every possible type of sound and sense alliteration. Reaction times are disturbed in many cases. This is so marked that in some individuals the time necessary to complete even a Stanford was as much as two and a half hours.

Association distribution. There are no failures on the association test at this level. The group responds well to the aufgabe. Phrases are given by 76 per cent of the cases, but in only 13 per cent of the cases do they give more than 10 reactions of this character. The range of the number of phrases given is 0-64. The average number of phrases for an individual of this group is 6, with a mean variation of 6. The median number of phrases is 2, but the mode for the whole group is none. Individual reactions are given by all of the group. The number ranges from 3 to 57, with a median number of 14, a mode of less than 10, and an average number of 16, with a mean variation of 7.

The number of common reactions given by any one individual depends largely upon the number of individual and phrases reactions which he does *not* give. In this group the greatest number give between 20 and 29 common reactions with values over 100. But there are almost as many who give between 40 and 49 common reactions. In general, the group curve follows the curve of the norms for children under 16, but there are definite individual anomalies.

Association quality. Over 80 per cent of the group show some abnormality of quality on this test. Delayed and accelerated reactions, complex indicators by the score,

emotional lack, automatisms, perseverations, superficial environmental or sound reactions appear again and again. There are 25 per cent, at least, who give enough indications for the test to be a definite basis and starting place for analysis and corrective education.

Performance tests. On the Seguin formboard the 10-year-level group ranges in individual scoring from a median 6- to a median 14-year-level performance. The mode of performance, as well as the median, is 11 years, but the average is slightly less, 10.9 years, with a mean variation of 1.2 years. There are almost as many scoring at a 10-year median as at an 11-year median, but there are more who score above 11 than there are who score below 10.

On the imitation series the range is from scores of 7 years to scores of 18 years in two instances. The modal performance gives a rating of 14 years. The median coincides with this, and the average is 12 years, with a mean variation of 2.8 years.

On the adaptation series the range is from 6 to 8 years. Although the upper value of the test is so limited, yet there are 9 out of the 61 children to whom a perfect score is impossible. This is a significant failure at a 10-year level. The average score is 7.8 years, with a mean deviation of 0.3 year.

Only 42 were given the Porteus series. The scores range from 7.5 years to 14 years. The group is so well distributed in its performance that there is almost no perceptible mode. If grouped in performance of those who score a whole year and the additional six months with it, then we have a mode at the scores of 10 and 10.5. The average score is 11 years, with a mean variation of 0.3 year.

On the Healy performance the possibility of low scoring with high mental age on other series is even more perceptible. The "mental age" scores on this test range from

5 to 15 years. The mode and the median performances are only 8 years, although, because of a large number who score at the 15-year level, the general average is 9.9 years, with a mean variation of 2.7 years.

School performance. On the literacy test the scores range from 0 to 32. The modal performance is a score of from 21 to 25, which is fifth- to sixth-grade work. The median score is 23, and the average is 22, with a mean variation of 4 points. Although there is one score of 0, this is not due to lack of opportunity to learn but is a specialized defect. None of the others scores below 9 points.

The percentage of inaccuracy on this test ranges from 0 to 40. The mode is less than 5 per cent, the median is 14 per cent, and the average is 13 per cent, with a mean variation of 8 per cent. The high percentages of inaccuracy assume more individual significance when we compare them with these general tendencies.

In arithmetic, the group ranges in ability from poor first-grade ability to good sixth-grade accomplishment; 42 per cent score successfully as far as third grade and no farther, whereas 37 per cent score less than this. Only 4 per cent score above fourth-grade work, and those are younger children fairly well up in school.

In spelling, the range is from second grade through seventh. The modal and median performances are sixth-grade, but 13 per cent score as low as second grade.

In geography, the ability ranges from second- to fifth-grade performance, with the mode at third-grade work, 49 per cent scoring at that level.

In language, the general rating is about third-grade, with a range of from second- to fifth-grade. Just 51 per cent score at the third-grade level, being able to form simple sentences correctly, but ignorant of all save guessing methods of punctuation, and knowing nothing of construction beyond the sheer inelegant statement of a fact.

General information. Here the group varies as greatly as in other respects. There are 26 who have what would be a fair amount of general knowledge for their mental level; 14 more might be said to have good general information. In 2 instances the accomplishment is surprisingly good. In 5 it is poor, and in 2 more very poor in general. In 3 there is deorientation for place, in 5 there is deorientation for time, and in several for events. Besides these overlapping deorientations of some specialized phase, there are 2 who are in a definitely confused state, and 4 who have marked delusional content no matter how or what the subject matter approached.

Own story. In 25 instances the story told by the individual shows phases of his difficulty and abnormality, and of his individuality. Of course, this group includes the group of 6 who are so deoriented as to have delusions. Most of the others who are even partially deoriented reflect their handicap in their story. The thing that strikes one is the similarity of tales told again and again. It may or may not be true—that is a matter for speculation—but the greater number of this group assert that they are not the responsible individuals, merely the helpers, or aides, or innocently enticed, and unsuspectingly-caught "buffers" for confirmed desperadoes.

Behavior under observation. Twenty-nine of the group give definite indications of peculiarity even during the periods of laboratory examination. These 29 are recorded as being verbose, apathetic, very forgetful on the tests themselves, listless, slovenly in work, sullen, unemotional, confused, nervous, flighty, hypersuggestible, extremely slow, fidgeting to an extent bringing interference with work. Just as marked reports are made of the favorable qualities in the other cases, so that the records are not one-sided.

Medical findings. Out of the group of 61, 14 are known congenital syphilitics according to laboratory findings, and

4 others are congenital syphilitics from definite stigmata of skull, fundi, etc. In 26 of the group the reflexes are abnormal. In 23 instances there are poor eyes, whereas ears are defective in 7 cases, and 21 have palpable or definitely enlarged glands. Two are choreic, and 4 have had some sort of spells. Rachitis, scoliosis, scaphoid scapulæ, round shoulders, flat feet, knockknees are present in many of them. The individual peculiarities are numerous.

Morphological measurements. The comparison with Smedley's norms shows that we have a group that averages 58 in the percentile groupings. There are 38 per cent of the group who are above the 80 percentile in standing height. In sitting height the average shows inferiority of development, being only 45. The weight of the group indicates a good general state of nutrition, being 60 on the percentile rating, with 39 per cent rated above 80 per cent. In right and left grip the group scores 45 and 40 per cent respectively, and there is much more individual irregularity of scoring. Lung capacity on the spirometer gives an average performance of 50. The total group is inferior in these respects, but throughout there is one sub-group that scores high, another that scores consistently low, and a group that varies up and down, back and forth.

Heredity. Only 2 of this group come from families that contain individuals who are definitely known to be feeble-minded, but 9 have definitely established insanity in the line of direct ascendance. At least 9 other families are definitely neuropathic. In 9 families there is criminality, in 16 we find alcoholism, and in 18 there is marked immorality. The history is indefinite in 2 families and definitely normal in 4 others. In all of the rest we find some signs of marked inferiority, laziness, tempers, pauperism, cruelty, wanderers, and paralysis.

The family of the 10-year-level individual is inferior, but the condition seems to be a complication of minor

tendencies to abnormality, or to abnormality of function, instead of a straight and uncomplicated lack of sufficient intelligence. In other words, the families of these individuals show disease, nerve instability, and psychopathy, not feeble-mindedness.

Diagnoses. Only 3 of this group of 61 were definitely diagnosed as feeble-minded without any additional handicap being ascertainable. There were 16 others who are of feeble-minded level, but where the diagnosis was one of feeble-minded in level *now,* and further handicapped, or motivated to abnormality of behavior, by some functional disturbance: 11 of this group are definitely psychopathic, 2 others are psychopaths who are definitely deteriorating, but no cause for the deterioration was ascertainable. In another instance a deteriorating psychopath was definitely syphilitic; moreover, the mental changes were paralleled by actual physical signs of deterioration. Two others were psychopathic to the point of actually suffering from psychoses. One of these was a deteriorating case. One other child seemed to be a potential case of feeble-mindedness, and he was also a psychopath. There are 31 of the children who are inferior in mentality but not inferior enough to be called feeble-minded or for one to feel that, so far as mental level goes, they might not make good out in the community. All of this group are more or less psychopathic. In 4 the psychopathy is deteriorative in type. In 1 it is syphilitic. In another case the condition is one of predementia, another is actually a dementia præcox, whereas another is an epileptic. Four of the children are slightly inferior, but with instabilities of such a type that there is evidently chance for favorable as well as unfavorable change. In these 4 instances diagnosis is actually deferred. In 2 other cases, subject to epileptiform seizures, the outcome is a matter of watching and waiting. There is 1 individual in the group who seems to be thoroughly normal and whose

behavior has been corrected by analytic work extending over a number of months and accompanied by definite reëducation. One bright, normal individual gives marked indications of a deteriorative psychopathy. This child gives negative laboratory findings but has stigmata of syphilis.

Generalizations. Such a group report as this seems to mean utter discouragement if one would attempt corrective or reformative work. We must remember, however, that these children are extreme cases and represent the maximal type of problem with which we have to deal. Even a casual glance over the summary can but impress one with the fact that the delinquent, however serious his delinquency, has a reason for his being delinquent. He is unstable, neurally and psychically, as well as poorly endowed physically, and with hereditary handicaps instead of potentialities.

Between 11 Years and 11 Years, 11 Months Mentally

The 50 individuals composing this group are even more interesting than the members of any of the groups previously discussed. These 50 are probably highly representative of most of the troublesome factors in our social fabric. There are only 3 of foreign parentage. In only 1 of these instances is there any known abnormality of family conditions. In this case, the people seem normal enough, but they have left the boy to shift for himself in a way that is entirely incompatible with their general attitude towards most things. There are 3 mulatto children in the group, 1 boy and 2 girls, but they have all had good homes and wise attempts at preventive education. There is 1 negro boy. The others are white children, American-born, with 2 or more generations of American living back of them. They come from all sorts of homes, the very best, the very poorest. Some have been under state guardian-

ship or local charity protection since earliest infancy. There are "only" children and those who come from large families. The majority of the group seem to belong to self-supporting middle-class families, but a detailed investigation reveals the same type of causes and reasons for instability of behavior as we have seen in the children who test at lower levels.

Age and sex. There are 30 boys and 20 girls in the group. The range of ages is from 9 to 18. None of the girls referred is below 11 years of age but there are 3 younger, bright boys in the group. There are, on the other hand, only 2 cases over 18 and these are both girls. The modal age of the boys referred to is 13, of the girls 17. The group as a whole has a double modal of 16 and 17. The average age is 14.5 years.

I.Q. The range of I.Q.'s for this group is from 69 to 126. There are 5 children, or 10 per cent, who have intelligence quotients over 100. Eight other children have I.Q.'s of 90 or over. Twenty-one of the group have I.Q.'s under 75, yet there is absolutely every reason to believe that but few of these children are definitely feeble-minded. In the first place, reëxaminations after a brief period of proper living and working have revealed marked changes in many of the most problematic individuals. One boy who tested 11 years, 3 months at the time of first examination, and who was then 16 years, 6 months of age, scored 14 years, 2 months after 8 months of supervised working and earning his own living. At that time the repetition of his original offenses again brought him into the laboratory for study and actual mental disease evidenced itself for the first time. This may be considered the logical evolution of the case, for both the mother and his brother are insane, and the father of the boy has extreme psychopathic tendencies. In other cases these lower I.Q. children are now doing well, normally, in fact, in the community.

In other cases, seemingly more hopeful than the average of the group, the passing of time, continued care, and experimentation have brought nothing but disappointment and the further evolution of the abnormal tendencies. The group does not impress one as stupid or even dull. They are rather overwise, overconfident, crafty, and fending for their own interests, regardless of society's regulations.

Delinquency charges. There are 107 formal charges against the 50. Of these, 19 are for persistent lying, whereas 27 cases steal, the thieving usually being a serious matter. There are 21 who are chronic truants from home or school, with the wandering sometimes lasting for days, and 15 who are immoral. Besides this, the group contains 1 case of actual murder, 2 of threatening murder, a single case of gambling, and a minor number of incorrigibles, temper cases, fire-setting incidents, refusals to work, and cruelty. Six of the group have had one or more terms at the industrial schools before the time of the offense that brought them to the Bureau.

School grades. The school accomplishments vary from a minimum of 3 grades to a completion of the ninth grade of public work. The mode have completed 5 grades, but the median number of grades completed is 6. The average number of grades is 6 with a mean variation of 1.2 grades. The two children who had finished only 3 grades were a child of 9 who had made his grade each year in school, and a mulatto of 11 who is a wanderer. The only child completing the ninth grade was an inferior psychopath, a pathological liar, and a wanderer, who is also immoral.

Stanford range. The average range in number of years above the basal, through which tests are done, is 6.6. The median number of years of range is 6, but the mode is 7. There is 1 child who has a range of only 2 years, 1 with a range of 3 years, and then, on the other hand, there are 4 with a range of 11 years above their basal. These 4,

although they test above 11 years mentally, fall back to 7 for a basal year and score successes through the 18-year level. Of course, in order to gain an 11-year level, tests must be done into the 12-year level at least. The wide range of successes indicates the need for, or presence of, a low basal year. One child goes back as far as a 6-year level, 12 have a basal of only 7, 15 have a basal of 8, 19 have a basal of 9, and 3 have successes in all tests through the 10-year level. There are 5 children out of the 50 who have full years of successes at a higher level than the basal used, but they fail on tests below this complete year.

Stanford distribution. The distribution of tests indicates that the group is poor in motor control. The diamond is the only 7-year-level test missed. The ball and field has 24 per cent of failures at the 8-year-level, the counting backward ranks next with only 8 per cent, and no other test is failed, save the vocabulary, and in it only 2 per cent fail. The digits backward are difficult at all levels where they appear; 19 per cent fail in this at the 9-year level, 56 per cent fail at the 12-year level, and 98 per cent at the 16-year level. The digits forwards are comparatively difficult, 24 per cent failing on 6 digits at the 10-year level, 79 per cent on the 14-year level repetition of 7 digits, whereas 98 per cent fail to repeat 8 digits. Only 1 child scores up to a 14-year-level vocabulary, whereas 78 per cent fail to score at the 12-year level. Forty per cent cannot do the 10-year-level design. The group is good in the comprehension questions, similarities, fables, logical problems, and, comparatively, on the cut design.

Stanford quality. The tests show a certain tendency to peculiar reactions. This is very marked in some instances and much less so in others. In spite of the fact that the test is passed, some of the diamonds show peculiar line tremors, etc. The ball and field, the design, and cut design show the same tendencies. There is usually a fairly definite

attempt at coöperation in the group, but even that does not rule out frequent loss of the task idea before the task is completed. Perseverative continuation of one set of directions on to the next task, verbalistic failures, delayed reactions, egocentric interpretations of tests, and like idiosyncrasies appear in a number of the cases.

Association distribution. None fails on the test. Individual reactions range in frequency from 2 to 46. The average number is 13, the median 12, but the mode is less than 10. There are phrases present in 66 per cent of the cases; their frequency ranges from 1 to 43. The average number per individual is 4, the median is 2, and the mode is no phrases at all. Only 2 give more than 10 phrases, only 5 give over 5 phrases.

Association quality. In 39 of the 50 cases (78 per cent) the qualitative analysis of the tests gave definite pathological symptoms. In 10 per cent of the cases the complex indicators were a sufficient basis for beginning psychoanalytic work. Delusional concepts were nicely revealed in 2 cases. In the other 64 per cent of the cases with some pathological condition revealed, the indications were similar but were less marked. The test gave no help in 22 per cent of the cases.

Performance tests. The Seguin formboard gives a range of credits from that equal to the average for 8-year-olds to the 14-year-level average. The mode and median performances give an 11-year score, whereas the average score is 11.3 years. The mean variation is only 1.1 years. One must remember in studying this test with children of a higher level that, like the Goddard-Binet, it stops short of possible standardization at higher levels, although a good bit of this is due to the inability of any organism physically to accomplish the task in less than a certain minimum amount of time. The Sylvester standardization, used in this study, stops at the age of 15. The fact that the 11-year group

gives a secondary mode of 16 cases who score at the 15-year level indicates that the group is "100 per cent efficient," in respect to the demands of this test.

The adaptation test shows some failures. Two children are unable to score more than the 6-year level on this test, and 2 others score only 7 years. The other 46, or 92 per cent, have perfect scores. Naturally, the mode, the median, and the average scores almost coincide in such a series. The significant cases are those that fail.

On the imitation series ability ranges from scores of 7 to 18. The mode is 14 and 15 years, with a median at 14. The average is 13.5 years, with a mean variation of 2.6 years.

On the Porteus the variability is proportionately as great. There is an actual range in ability from 7 years to 13.5 years. The mode, median, and the average are 10.5, 9.75, and 10.7 years, respectively. There are 17 who score under 11 years on this test, but there are only 13 who score 12 or over. Peculiarity of behavior and poor manual-motor control are often definitely revealed by this test.

On the Healy performance test for comprehension the range of scores is from 6 to 15 years. The mode is 15 years, but the median is only 10 years, whereas the average is 11.1, with a mean variation of 3.0 years.

School performance. On the Ohio Literacy test the group shows as great a variability as on the performance tests. The individual scores range from 7 to 39 points, which is equal to variability from second grade to college ability in this respect. The average is 25 points which is equal to a 60 per cent rating for sixth grade, or 30 per cent for seventh grade. The inaccuracy on this test is rather high. The mode is less than 5 errors, but the average is 10 with a mean variation of 5.

In arithmetic, the achievement is much less. There are 34 per cent who do not do more than second-grade work,

and 52 per cent who do only third-grade work, so that only 14 per cent accomplish as much as fourth-grade requirements. Only 1 does fifth-, and 1 does about sixth-grade requirements.

In spelling, ability ranges from second- to eighth-grade ability. The average rating is sixth-grade with a mean variation of 1 grade.

In language, the range is from the lowest measurable ability to achievement that would mean completion of the regular grade requirements. The mean performance is fourth-grade with a mean variation of 1 grade.

In geography, the variation is a little less. None seems to fail in those elementary ideas which are usually acquired in third grade, but none does much above poor seventh-grade work. The mean is fifth grade with a mean variation of less than a year. Of course, such a test definitely involves orientation, and a disability in this respect would naturally show on the geographical score.

General information. Only 20 per cent of this group show any abnormality in the orientation series. There seems to be no general type of disturbance. Some are deoriented for time, others show marked difficulty in the comprehension of actual happenings, others are dissociated for family and individual experiences. In others it seems to be more the judgment side, the criticism of happenings, which is lacking. This handicap shows no regular relation to age, sex, or color.

Own story. Some abnormality in the tales of their own experiences before coming to the Bureau shows in 36 per cent of the cases. They are ambiguous, ramble on incoherently, are depressed unduly, focus on the wrong and non-essential factors. Some become so filled with self-pity that they cannot tell their tales without great emotional strain. Others are highly irritated at the situations and enlarge on the tales so that two, three, and even four tellings

are necessary before the truth reveals itself by the permanency of details. The majority of individuals of this level are, however, quite ready and willing and able to tell their own story simply and accurately. A normal tendency to slight their own responsibility in the affair shows but little. They can be readily trained into an impersonal attitude of telling it as a group of symptoms which must be handled and recognized as a part of the problem, if they are to have "another chance."

Behavior under observation. Fifty-two per cent of the group show abnormal symptoms when under observation in the laboratory. The greater number of these exhibit great ease of distraction, delayed or accelerated reactions, emotional lack or emotional excess, or that type of nervousness which means twitching, inability to sit still, and keep at individual tasks. There are 5 who seem to have delusional content as a basis for suspicion, haughtiness, distress, and antagonism. Needless to say, this is a conservative count, for there are doubtless others in whom the ascertainment of such complexes could not be expected unless observation had been much longer than that allowed under the exigencies of the situation.

Medical findings. Out of the 50 there are 10 known congenital syphilitics. Of these, 7 give positive Wassermanns at one time or another, whereas the other 3 have conclusive bone or teeth stigmata of the condition. There are also a few children who give suspicious signs, but these were not definite enough to make the cases other than questionable. In 46 per cent of the group there was defective vision, and 9 per cent had defective hearing. The deep reflexes are abnormal in 44 per cent, and 22 per cent give positive Rombergs. In 42 per cent the glands are palpable or definitely enlarged. Chorea has affected 10 per cent at some time or other, and 4 per cent have convulsions. There are individual cases of hypospadias, acromegaly,

undescended testicles, otorrhea, deformed toes, and two cases each of paralysis, gonorrhea, and hernia. There are numerous instances of scaphoid scapulæ, rachitis, knock-knees, round shoulders, and scoliosis.

Morphological measurements. In standing height the group is above average for the age of the individuals composing it. The mode of the distribution gives a rating of 60 per cent. There is, however, a group of 18 per cent who score over 90 per cent on the scale. In sitting height we again have a group who are inferior; 26 per cent score in the lowest 10 per cent of the norms, and only 6 per cent in the highest decile. The average score is between 30 and 40 per cent. The group gives a double curve distribution. In weight we seem to have again a mingling of two groups. There is a mode at 50 per cent and a double mode at 80 and 100 per cent. In other words, 44 per cent score over 70 on the weight rating. In grip the group is decidedly inferior, 18 per cent score in the lowest decile, and the average is about 40 per cent. The distribution in left-hand grip is more nearly that of the norms. In lung capacity there is a reversed situation; 22 per cent score over 90 on the norms, and 46 per cent score 70 or more.

Heredity. There is not a case of known feeble-mindedness in the families of this group. On the other hand, there are only 4 cases where we have definitely normal families. There is direct, insane inheritance in 18 per cent of the cases, epilepsy in 4 per cent, alcoholism in 16 per cent, and criminality in 16 per cent. There are 20 per cent of the families in whom immorality is definitely known, and 18 per cent in whom neuropathic traits are unmistakable. There is a history of syphilitic infection in 12 per cent, cruelty in 8 per cent, paralysis in 10 per cent, and occasional instances of "degeneracy," wanderers, desertion, laziness, divorce, low forms of living, and questionable behavior.

Diagnoses. In general, 11 years of intelligence seems to be enough to get along with, *if the full amount of intelligence thereby indicated works as it should.* The trouble with these individuals is not that they are too dull to understand, but that their understanding, or comprehension, or willing and deciding follows some devious path, instead of the predictable path taken by most minds as intelligent as they.

Only 2 of this group of 50 seemed definitely stupid and were diagnosed as simply "feeble-minded." Only 4 others were diagnosed as feeble-minded and psychopathic. Of these, one was epileptic, and another was a congenital syphilitic who seemed to be deteriorating. Exactly 40 per cent of the group were diagnosed as inferior psychopaths. This is not a permanent rating or diagnosis. The one thing hopeful about a psychopath is that he has so many chances of improving and becoming markedly more capable and intelligent. This is not so much a matter of actual later mental growth as it is an acquiring of ability to use his original endowment, as he becomes more stable and reliable. The mental level of a psychopath is always lower than his actual type of functioning, but the value of his type of functioning is lower than his actual mental age, because of his irregularity and undependability of behavior. There are in this group 2 other inferior psychopaths who are of a deteriorative type and 1 who is definitely hysterical. Four were actually insane. Besides these individuals, the group included 1 on whom diagnosis was deferred, 5 inferior normals who were more or less psychopathic, and 8 who were definitely normal but markedly psychopathic. There were also 2 bright normal psychopaths and an arrested case of dementia præcox. This last was a congenital syphilitic. One of those testing normal was a congenital syphilitic, as were 1 of the insane group and 6 of the inferior psychopaths.

Generalizations. It seems almost impossible to summarize this group. They should be followed intensively for a number of years. One cannot feel about many of them that they will make good in the community. Several cases out of the 50 yielded definitely to psychoanalysis. The rank heresy that immediately comes to mind is whether they would not have recovered anyway. Of the rest, there is little to be said that is favorable. Two cases of foreigners who were not properly adjusted to situations in this country are as hopeful as any. The majority make one feel that the reformatories, the jails, the dispensaries, the homes for unfortunate girls, the penitentiaries, and the insane hospitals will know them soon and well. A few are getting along at home. This is more a matter of home tolerance and increased ability in handling them than of improvement on the part of the children. A psychopath of an 11-year level is a potential menace and burden, far worse than a definitely feeble-minded individual. His activities are less predictable, because they are far more apt to be abnormal and eccentric. His range of activities is wider, his apprehension more difficult. *Yet,* properly provided for, the chances of helping him are far higher.

Between 12 Years and 12 Years, 11 Months Mentally

Twenty-four individuals scored at this level when first studied at the Bureau. Chronologically, they range from 12 to 16 years of age, with an average age of 14.8 years. The mode and the median ages are also 14. There are a mulatto boy and a mulatto girl in this group and also a negro girl. There are only 7 girls and 17 boys in the group. In intelligence quotients they range from 75 to 106, with a median of 83. This places the group at the upper limit of known feeble-mindedness, where we find the so-called "borderline" group. About half of the group would, by virtue

of their age, fall into such a classification. Yet a study of them does not indicate such borderlinity, unless one uses the term merely in its social sense of their being cases who may or may not make satisfactory citizens. However, the failure or success in this matter does not often, to the person who works with them, seem to be the result of insufficient intelligence, but of other factors, less readily evaluated in a mathematical sense.

Delinquency charges. There are a total of 60 charges against the 24 individuals in this group. The most frequent charge is stealing; 17 have offended in this fashion. The thieving of most of the group is of the professional type. They are adept as pickpockets or at breaking and entering. One of the boys has so persistently been sentenced for this sort of offense that he has averaged only a month or two of each year of his adolescence in the community. With 16 of them, running away, or truancy from home and school, is the charge. Of the rest, 3 are immoral and 2 are homosexual; 1 is obscene both in language and actions, 1 threatens others, 1 threatens suicide, 4 give way to definite temper tantrums which are varied and exciting, 9 of them lie to the point that they cannot be trusted to help on their own case.

School grades. In school they have reached any grade from fourth to tenth. Only 1 stopped in fourth grade, and only 1 reached tenth grade. The mode and the median for the group is 7 grades of school work, since 10 of the 24 have finished this amount of school work.

Stanford range. On the Stanford alone this group shows almost an innumerable lot of variations. There is none who does not succeed in tests at least as high as the 14-year level, whereas all but 4 do tests in the 16-year-level group and succeed on tests in the 18-year-level group. On the other hand, there is none but fails on tests in the 12-year group, and all but 4 fail on tests in the 10-year group,

whereas 10 fail on tests as low as the 7- and 8-year levels. The mode is a basal of 9, with successes through the 16-year level, but this is true only of 25 per cent of the cases.

Stanford distribution. If relative frequency of failures means anything, then this group is superficially verbal in its achievements. There are more failures on the ball and field at the 8-year level than on any other test that low. The weights, at the 9-year level, are missed by 5 out of the 22 individuals on whom tests at that level were tried. Only 2 missed the date, and no other test at that level was missed by more than 1 individual. At the 10-year level the design is the most significant failure, being missed by 9 out of the 24. The next most frequent failure is the giving of 60 words in three minutes which is failed by 5 (21 per cent). No other failure is more than half as frequent as this last. In the 12-year-level group there appear to be several tests which are decidedly easier than the others. These, peculiarly enough, are the definitions of abstract terms, the fables, and the dissected sentences. The vocabulary, the 5 digits backwards, and the ball and field are the hardest of the whole series, but difficulty on them is approximated by difficulty on the interpretation of pictures. Above this level the successes stand out as more significant than the failures. At the 14-year level the logical problems seem to be the easiest, with the repetition of 7 digits next in order, and the induction test and clock problems next. The vocabulary is the hardest of all at this level, being passed by only 3 out of the 24. The only tests at the 16-year level that are successfully done more than once or twice are the fables and the code. There are 14 per cent who succeed on the 8 digits in the 18-year group, whereas 33 per cent succeed in drawing the cut design, but all fail on all other tests at that level.

Stanford quality. Inspection of the individual answers on the Stanford reveals just about the same tendency to

peculiarity and abnormality as was found in the groups of lower mental levels. There are fewer reactions of the type that show perseveration and automatism, but more that reveal queer types of association and delays of reaction. Seven out of the 24 give such abnormal indications in marked fashion. Most of these give some indication of their difficulty in the performance of the drawing tests.

Association distribution. None of the individuals at this mental level fails on the association test, but all are capable of more or less accurate following of the directions. They are not all capable of reacting by single words, for 15 of the 24 give phrases. However, only 6 individuals give over 5 phrases. The mode is no phrases, the median is 1 phrase, and the average is 4 phrases, with a mean variation of 4. The number of individual reactions given is also less than at any of the lower levels. The number of individual reactions ranges from 2 to 26, with a mode of between 5 and 10, and a median of 9. The mean is 11 individual reactions, with a mean variation of 6.

Association quality. In 16 out of the 24 cases there was a peculiarity of responses inviting further research into its reason for being. This was indicated in the reaction time in a few instances but was largely a matter of abnormal tendencies in the reaction word itself.

Performance tests. On the Seguin formboard the group ranges in ability from the average 8-year-level performance to the average 12-year-level score. The mode, median, and mean are all 11 years, with a mean variation of 1.2 years. In other words, on this test where the group are approaching the upper limit of its standardization, their performance is a year below what we would expect for their mental age by the Stanford.

On the adaptation series we have 1 individual who cannot score above a 4-year level, 4 who score a 7-year level, whereas the other 19 complete the whole test. The test is

highly significant when we meet with a failure, and the failures are frequent enough to warrant the regular giving of the test to all individuals of this level. An individual of 12 or more, who cannot do more than a 4-year-old does on a simple performance test, although scoring at 12 years in many forms of mental activity, is anomalous. His failure on an adaptation test enables us to see why his social adaptation might be poor enough to lead to delinquency, or maladaptation.

On the imitation test the scores range from 8- to 18-year levels. The mode and median performances are 15 years, with a mean of 13.9 years and a mean variation of 2.0 years. However, there are only 2 who score as low as the 8-year level, and 3 who score at the 10-year level. Yet these low scores are highly significant, more so because of their infrequency.

On the Porteus series the scores range from 8.5 years to 13.5 years. The mode is 10.5 years, and the median is identical with it. The mean is 10.7 years with a mean variation of 1.6 years. Evidently, ability on this test is no more highly correlated with that indicated by mental age, than is success on the other performance tests.

On the Healy completion board the scores range from 8 to 15 years. The mode is an 8-year-level performance, but the median is 10 years and the mean is 11.1 years, with a mean variation of 2.5 years. Out of the 24, there are 13 scores of less than 11 years on this test and 2 scores at age. The remaining 8 score 13 to 15 years. Another indication of another line of variation!

School performance. In literacy, the scores range from 16 to 33 points, which is equal to a range from low fourth- to high eighth-grade performance. The mode is a score of between 31 and 33. The median score is 27, and the mean is 26.8, with a mean variation of 4 points. There is a variable amount of inaccuracy in the results, with a

range of from 3 to 29 per cent of the work done. The mode is less than 6 per cent of inaccuracy, and the mean is 11.3 per cent with a mean variation of 6.1 per cent.

In arithmetic, the group varies just as much; 2 do no more than the simplest second-grade work, whereas 2 have been proven capable of the intricate problems demanded of seventh-grade pupils. The modal and median scores are 3 grades of work accomplished, but the mean is 4 grades, with a mean variation of 1.2 grades.

In geography, ability ranges from third to eighth grade, with a median performance of 5 grades, double modes at fourth and sixth grades, and an average accomplishment of 5.3 grades, with a mean variation of 1.3 grades.

In language, the range is from second to seventh grade, with a mode of 4 grades, a median of between 5 and 6 grades, and an average of 4.3 grades, with a mean variation of 1.4 grades.

In spelling, the range is from third- to eighth-grade ability. The mode, median, and average agree, being 7 grades, only 6 children falling below this level.

General information. In general information, the group is fairly good. Only 7 of the 24 show any abnormalities. The peculiarities of this group of 7 are not identical but they are similar in 6 of the cases. One individual has such a superior type of information and general knowledge that this very fact, entirely out of relation to her history, behavior, and advantages, was in itself an indication of abnormality. She had reached her present low level by regression but maintained some of her superior aspects. The other 6 may be characterized as "shut-in." They had narrow range of interests, and even narrower ranges of information and comprehension. Time, itself, was not fully appreciated or understood. Current events of their own immediate environments had but little significance. Values, means, methods, and practical matters of earning and

spending meant far less than they should to a 12-year-level intelligence.

Own story. Nine of the 24 give evidences of their peculiar twists in telling their story. Two of these were definitely grandiose in their manner, exaggerating everything that exalted their personalities, minimizing or ignoring all to the contrary, making up tales to suit the situation. Two definitely revealed delusions of persecution. In both cases these tales were logical and definitely related to the past experiences of the individual. The one centered around the father's neglect of the child, the other was built up on the fact that the boy was a mulatto. A sense of inferiority had been compensated for by a belief in his actual and unrecognized superiority and the determination to demonstrate it. Within a month this had developed into a most violent psychosis. One other individual out of our 9, who was much younger, suffered from a toxic goitre, and his condition will require a longer time for its final evolution. In the other 4 individuals there was incoherence, deorientation, forgetfulness, delay, and sullen silence. The stories they told were far from complete or even circumstantial.

Behavior under observation. Just half of the group showed abnormal tendencies under observation. These symptoms ranged from simple exaggeration or chronic lying in some cases to actual spells in others. One child insisted upon having spells whenever he was in any way slighted. These spells had been constant for several years. They yielded to being excluded from motion-picture parties and fudge treats; when he once definitely understood that he would never be included in either of these if he "fainted," he never had another seizure. One child made a series of delinquency charges against another boy, fortunately known to be innocent, and the breaking down of these charges took two days of constant analytic work. One of the girls told spectacular tales of having been a

white slave, yet her actual commitment was to prevent the possibility of any immorality. The group, as a whole, represents a factor that was never stable or reliable while under observation. One attempted to incite a whole group to make a "getaway." One persecuted any child or animal he could get in touch with, when out of sight of an attendant. One alternately wept, laughed, and fought, and came to the laboratory for help in "being good." Sex interests made watchfulness a matter of constant thought. Stealing, passing sex notes, attempted sex incidents of a homosexual nature were numerous.

Medical findings. The group has physical excuse for some of its behaving. Four are known congenital syphilitics; 13 have disturbed reflexes; 6 have had, or now have, convulsions of some nature; 5 have palpable glands, and 4 others have definitely enlarged glands. Ten have bad eyes; 2 have chorea. Rachitic symptoms are present in 2, 2 have scoliosis, and 6 have scaphoid scapulæ. Many other symptoms are shown by one or two.

Morphological measurements. Compared with the Smedley tables the group shows a wide variability, but there is one group of average standing height and another well-grown group above 80 on the percentile ratings. In sitting height we have a very short, poorly matured group and another group of average height or better. In weight the group, with three exceptions, reaches at least the 40 percentile, and many reach that sign of good nutrition—the 80 percentile. In grip we have a poor group and a very good group. The same holds in lung capacity, all distributions showing at least the two modes, and sometimes a third where the two group distributions cross.

Heredity. The cause of this group is not far to seek. Five families have a definite hereditary tendency towards insanity; 3 have the epileptic tendency. Four families, besides these, are definitely neuropathic. A syphilitic his-

tory is clear in 2 instances, and there is paralysis in 3 instances. The families boast criminals in 6 cases, confirmed alcoholics in 7. There are 2 instances of feeble-minded individuals but in neither case in a line of direct descent. The history is absolutely unknown in three instances.

Diagnoses. One of the individuals was definitely called a feeble-minded psychopath. Nine were classed as inferior psychopaths and 2 as inferior normal psychopaths. Seven were normal psychopaths. One normal psychopath had epileptic equivalents, another was a deteriorating case, whereas 2 others were actually insane, and 1 was a predement. Following these cases gives but little reason for changing the diagnosis. Of the normal psychopaths several have absolutely made good.

Generalizations. This group presents a true problem of psychopathy. The writer has no doubt but that twice and thrice the work done on the 24 cases would be necessary to obtain all of the information necessary to solve the problems of causation and corrective education for all of them. In some instances no amount of work could accomplish this. Those who have the normal tendency seem to turn out normal with little attention, those who do not, no amount of work brings right.

The last statement emphasizes another complexity of the problems presented by the psychopath. There are psychopathies and psychopathies. Some are frequent incidents in the life of normal individuals, others definitely indicate a pathological condition. The children in this group of mentalities, 10, 11, and 12, give us a general idea of difficulties to be met. At these three levels we find a gradually decreasing percentage of the feeble-minded, and a constantly increasing number of the not-feeble-minded, but not-normal, who are almost always psychopathic in their make-up. Increasing mental age definitely eliminates one prob-

lem only to bring in another, a more difficult one. Does this hold for higher levels, or is the psychopath especially a transition problem appearing most frequently in the zone of doubtful ability and dubious futures? A study of higher mental levels will best answer this.

CHAPTER XVII

NORMAL, BUT—

A DIAGNOSIS of "normal in mental level" on any child below a mental age of 12 or 13 is one which cannot help but be hazardous, if made from the standpoint of mental age alone. It is based upon the assumption that the future development of the individual diagnosed is to be in proportion to his development heretofore. That is the principle upon which the I.Q., or intelligence quotient, is based. It is a calm mathematical method of prognosis, very obvious, very fair, easy to explain, but—hazardous. The cases the writer has presented so far are sufficient to show that. Some children develop at a seemingly normal rate until they reach 8, 9, 10, or even 11, and 12 years of age, then they stop abruptly and remain indefinitely at the level achieved. Even this is not the only possibility, for regression and actual deterioration may, and do, occur. It is not necessary to discuss this statement in detail, for the matter has been analyzed with statistical completeness and thoroughness by Doll.[1] Such possible variability has been considered again and again as a factor weighting our determinations in this study up to this point.

In this group the mental level achieved is high enough to eliminate any discussion of the probability of future development reaching or not reaching normal-adult level. In other words, this is a group of cases who are not potentially feeble-minded, not inferior, or even potentially bor-

[1] Edgar A. Doll, *The Growth of Intelligence*, Psychological Monographs, 1921, Vol. 29, No. 2.

derline, for their mental level is high enough to throw them above the plane where any such things are possible.

The army tests have been cited so often as the final proof of the intelligence level of the general public, that the plea of triteness alone suffices as an excuse for not discussing the findings on them in detail. To summarize briefly: The reports of the psychological tests on 1,500,000 soldiers showed that the mental level most frequently achieved by the average human being was that graded C on the tests. Interpreted into mental age this means 13 to 14 years. This, then, is probably the mental level of the great mass of people, normal people, whom we meet very day. In general, one does not expect such individuals to prove unable to handle the affairs of everyday living, and they justify this lack of expectation. The group at this level forms the social solidarity which sustains our democracy. They vote and think little. They work, marry, raise families without philosophizing. They maintain balance, they are the intelligent part of the so-called masses.

Such a level is surprisingly low to those who accepted unquestionably the Stanford revision of the Binet-Simon scale, which placed average normal-adult achievement at the mental age of 16. However, in general, we must accept the army findings. The statistical validity of the work supervised by Yerkes and recently reported in detail by the Academy of Science is overwhelming.[2] He points out that the level of the group studied may be a little lower than that of the general public, since men of higher intelligence became officers, and formed the greater part of the group of professional and business experts who were exempted because they were essential to industrial activity.

On the other hand, feeble-minded, epileptic, and insane individuals were also eliminated and were probably almost

[2] *Psychological Examining in the United States Army*, compiled by Robert M. Yerkes, *Memoirs* of the National Academy of Science, 1921, Vol. 15.

equal in number to those of higher intelligence level who were exempted. As a result, the distribution is probably not so unequally balanced as it might seem at first. The actual intelligence of the principal sample of the white draft is reported by Yerkes to be 13.08 years, or, roughly speaking, 13 years.

Such a definite fact necessitates a revision of one's ideas of "normality," or, rather, of intelligence level in its relation to normality. One can no longer look upon the individual who tests 13, or 13 plus, as a person who is "borderline" or "inferior normal" in level. He has a mental-level endowment equal to that of the vast group of human beings around him, and handicapping or disqualifying factors must needs be sought elsewhere.

Does this same condition hold for adolescents? It is unfortunate in the extreme that no concentrated effort has been brought to bear upon this problem. So far, interest in the critical side of tests and text-findings is limited to one or two individuals. Doll reports the results of examinations on 514 public school children in Trenton, New Jersey, and of 480 delinquent boys at the State Home for Boys at Jamesburg, New Jersey.[3] In both these groups he finds "average development is complete at about 13 years, since the median scores of ages above 13 do not materially exceed those at 13, and in fact at some ages are below." In the normal group the mental age reached is 13, but in the delinquent group the mental age reached is much lower.

Doll does not interpret this to mean that there *can* be no mental change after 13, or that that mental age is necessarily the end of achievement, *but*, "on the average, or for 50 per cent of presumably unselected cases, intelligence growth is practically complete at 13 years." In a later study [4] he corroborates this finding and states that for

[3] Edgar A. Doll, "The Average Mental Age of Adults," *Journal of Applied Psychology*, 1919, Vol. 3, pp. 317-328.

[4] Doll, *The Growth of Intelligence.*

feeble-minded children, at least, mental age is less apt to increase the older the child becomes, and significant increase is rarely, if ever, to be expected after the age of 13.

As it happens, 23 of the 369 delinquents reported in this study have mental-age levels of 13 or of some value between 13 years, 0 months and 13 years, 11 months. This would undoubtedly qualify them for admission into the group of "average mental level." The group is chronologically younger than the army group, but it compares favorably with Doll's groups.

These 23 are, with one exception, delinquents. Of that there is no doubt. They have reached a mental level equal to that of the community in which they have lived. In fact, some of them have, since the time of this first rating, reached a much higher level—all of them are above that plane of development where one can attribute their delinquencies or misdemeanors to lack of intelligence. We may discard that factor in studying them. We must analyze beyond it for traces of the motivation to wrong-doing. We are confronted in this group with the old argument that bright or intelligent men are wilfully criminal. Is it so? Eliminating our 1 non-delinquent leaves us 22 delinquents who test 13 years to 13 years, 11 months. Can our knowledge of these 22 normal-level cases give us any clue to the difficulty? Are they "moral imbeciles"?

Rather than tempt the credulity of the reader who cannot estimate mere figures or tabular statements back into clinical handling of individuals, we shall attempt to present the material in detail by succinctly recapitulating, in abstract, our findings on each and every one of these 23. Conclusions may then be formed more justly. The abstracts are arranged in the order in which the cases chronologically presented themselves for study.

NAME	MARIE E.	NAOMI I.
Age, Color, Sex	19 W F	17 W F
Family History	Unknown, save that mother is inferior.	Good family on mother's side. Mother died. Father good workman, indifferent to child, alcoholic, and ignorant.
Developmental Data	Negative.	Negative. Spent part of her time in a convent school in Russia.
School Achievement	Reached 6th grade.	Learned English and passed 7 grades in 7 years.
Behavior	Teaches children immoral practices. Is immoral. Cruel, stubborn, lies. Left her husband.	Sex accusations against men. Incapable of housework because so unclean in methods. Saucy, lies, careless in dress.
Medical Findings	Negative save for toxic goitre which was removed.	1918, all tests negative and full correction done on eyes, etc. 1919, has exaggerated reflexes, positive Romberg.
Psychological Findings	Stanford, 13 yrs., 5 mos. Very irregular in successes on all tests. Pathological associations. Grandiose ideas. Thinks she is a poet Poor motor control.	Stanford, 13 yrs., 9 mos. Slow and patient in answers. Sex, religion, and art complexes. Reactions slow.
Observations	Impudent, unmanageable. Disciplines other children well. Sex interests rampant.	Seems dazed by the multiplicity of demands upon her. Great desire to paint.
Diagnosis: Level	Normal.	Normal.
Function	Constitutional psychopath, probably affected by toxicity.	Psychopathic. Either a delusion of ability or real esthetic tendency.
Disposition	No change in irascibility after operation. Sent for continued care to State Hospital.	Believe worth trying a brief time in art school. Placed.
Prognosis	Poor. Instability and old habits mean delinquency if allowed free.	Deferred.
Subsequent History	After a year at hospital, test on Stanford is 14-3. Little stabilization. Seems old and worn.	In a week given free tuition because of ability. Converted many times second year. Gave up art. Deoriented. On edge of self-support.

Delinquents of Adult Mental Level

Nettie L.	Grant I.	Thomas S.
16 W F	18 W M	13 W M
Inferior stock.	Been a state ward for some years. No data on family.	Negative.
Negative.	Little known. Lived in foster homes.	Normal in all details. Had mastoiditis, no other illness.
Reached 8th grade.	Reached 6th grade in State School for Deaf.	Reached 8th grade.
Insolent, saucy, uncontrolled sex interests. Fear will become immoral. Lies. Cannot hold position.	Lies, steals, spends money foolishly. Very fond of girls. Writes grandiose letters to them. Stubborn and antagonistic.	Steals from relatives. Father is very stern and can make him tell his delinquencies.
Slight hyperplasia of thyroid which has been treated. Otherwise normal.	Deaf mute. Wassermann 4+. Been treated a number of years. Eyes bad. Six-year molars give specific signs. Reflexes negative.	Reflexes on reënforcement only. Von Pirquet positive. All other indications negative.
Stanford, 13 yrs., 1 mo. Very irregular. Quality peculiar. Lacks emotional tone. Arithmetic only 2nd grade.	Stanford, 13 yrs., 4 mos. Much irregularity after allowance made for deafness. Poorly oriented. Poor motor control. Fair education.	Stanford, 13 yrs., 3 mos. No marked irregularities. Inferior motor control. Inaccurate in school tests.
Delusions. People watch her. Tells things before she does them. Depressed spells. Deoriented for recent events and so seems to "lie."	Excitable. Gets angry very easily. Sex interests marked. Resents supervision.	Pleasant, well-behaved, reliable on errands where stealing is possible.
Normal.	Normal.	Normal.
Extremely psychopathic and deteriorated. Predement?	Psychopathic, with psychotic indications. Delusions of wealth and grandeur.	Deferred. Tests give little reason for trouble.
Advised State Hospital, but as not committed, placed under splendid visitor.	Assigned to State Hospital for treatment.	Not committed, so place with good supervision advised, in country.
Poor.	Poor. Good supervision, special training and medication have not helped.	Dubious.
Found impossible. Seeks men. Readmitted as committed case. Stanford, 12-7 only 2 mos. after other examination. Sent to State Hospital.	More deterioration shown on later tests. Ran away, stole, arrested, and returned.	Not placed in country. Stole auto. Sent to Industrial School. Paroled. Stole another. Returned to School.

NAME	HENRY G.	QUEED Y.
Age, Color, Sex	12 W M	16 W M
Family History	Father high tempered, very religious. Mother nervous. 5 sibs. One died in infancy. Two have "terrible tempers."	Excitable Russian Jewish family. Patient is a twin, other died at birth.
Developmental Data	Negative.	Born at 8 mos. Convulsions at 2 and 6 years of age.
School Achievement	In 7th grade; repeated 6th.	Has reached 9th grade.
Behavior	Has stolen since 6 years of age. Ran accounts at grocery, taking money meant for purchases.	Keeps jobs a few hours. Runs away. Has gone 600 miles to relatives. Steals money for shows. Loafs.
Medical Findings	Eyes have marked refractive power and fundus disturbance. Teeth specific. Bone anomalies. Small. Tests negative.	Refractive error. Minor stigmata. Wassermann 4+.
Psychological Findings	Stanford, 13 yrs., 10 mos. Poor motor reproduction and poor memory. Inaccurate school work. Over-inhibition.	Stanford, 13 yrs., 1 mo. Verbose, erratic associations. Easily distracted. Delayed reactions. Poor memory. Poor motor control. Delusions, walking dictionary, inventor, and other personalities.
Observations	On first admission was exemplary.	Annoys all by his wonderful tales of his achievements.
Diagnosis: Level	Normal.	Normal.
Function	Constitutional psychopath with stomach neurosis. Congenital syphilis?	Constitutional psychopath with actual psychosis. Congenital syphilitic.
Disposition	Paroled.	State Hospital.
Prognosis	Good.	Poor. Non-productive, no aid to the community.
Subsequent History	Stole again. Returned. Lied. Fought, stole. Sent to Industrial School. Now paroled.	Ran away. Gone months. Parents refuse to return to Hospital. Future trouble.

DELINQUENTS OF ADULT MENTAL LEVEL—*Continued*

ROSWELL X.	IDA H.	ANDREW Y.
17 W M	15 W F	15 W M
Father nervous, irritable, verbose, ungovernable temper, grandiose. Mother nervous. Patient is first child. Then 4 miscarriages, 1 stillborn, and 1 neurotic child.	Whole family socially parasitic for food, work, medicine. Father was alcoholic tubercular and inferior. Brothers steal. Sibs have had convulsions.	Mother dead. Bedridden from rheumatism and dropsy. Father alcoholic, and has rheumatism. 2 sibs had repeated terms at Industrial School. 2 are normal in behavior.
Refused food at first. Nervous, irritable baby. Perverted practices at 12 years. Became infected with syphilis.	Little known. Has lived with sisters last few years. Married recently.	Unknown, except had a few children's diseases.
In 9th grade. Always was a truant.	Reached 8th grade.	Stopped when in 6th grade, but had never repeated a grade. Some truancy.
Has always lied, stolen, and run away. Temper spells. Irresponsible. Wanders away.	Immoral before and since marriage. Hysterical, lies, careless, queer.	Earns $24 a week. Stole food, etc., at home and finally over $100 from father. Quarrels at home.
Refractive error. Blood Wassermann and spinal fluid positive. Treated but still positive. Loss of bowel control.	Nutrition poor. Defective vision. Reflexes exaggerated. Gonorrhea. Other tests negative.	Negative save for a 2+ Wassermann.
Stanford, 13 yrs., 4 mos. Wide range. Poor memory. Poor on performance tests. Dissociated, diffuse, over-suggestible. Poorly oriented.	Stanford, 13 yrs., 3 mos. Unbalanced in successes. Poor in vocabulary and on all learning. Erratic association.	Stanford, 13 yrs., 9 mos. Wide range. Reasoning poor. Inferior performance tests. Careless in detail and delayed in reactions.
Nervous, restless, talkative, over communicative. No trouble. Depressed spells, worries over his condition.	Sullen. Tries to act superior to the situation by lying about all sorts of minor misdemeanors.	Much interested in girls. Violates many rules. Silly, quarrels, temper, cruel to small boys, impudent.
Normal.	Normal.	Normal.
Psychopath. Deteriorating. Believe acquired syphilis was on basis of congenital syphilis.	Psychopathic, probably an inherited combination of traits. Hysteria.	Psychopathy of the type found in congenital syphilis. Some signs of Oedipus complex.
State Hospital.	Returned to local care for gonorrhea treatment. Then advised State Hospital.	Industrial School, with treatment advised.
Poor. Only a question of time and whether treatment may retard progress of disorder.	Poor. Should be kept from bearing children.	Poor. This is type of boy that crowds reformatories.
Taken home. Said to be "doing nicely" under treatment.	Sent for gonorrhea treatment and released.	Recently paroled.

NAME	OPAL G.	YATES N.
Age, Color, Sex	13 W F	18 W M
Family History	Mother immoral. Child illegitimate. Maternal aunt and uncle epileptic.	Paternal grandfather suffered from bad headaches.
Developmental Data	Delayed walking. Convulsions from age of 2 yrs. on. About 10 a yr.	Birth, early development, and health normal. Has seemed hard to handle since 4 years of age.
School Achievement	In 8th grade. A truant. Backward in arithmetic and grammar.	Began school at 5 but is only 8B in a special vocational school.
Behavior	Fights, swears, runs away, immoral.	Always told big tales, but last 2 years lies incessantly. No basis in fact. Steals. Lazy. Stays out nights. No shame.
Medical Findings	Palpable thyroid. Increased tendon reflexes. Minor stigmata. Epilepsy.	Has had good medical care, but has frequent headaches. Tendon reflexes diminished. All laboratory tests negative save urinalysis. Chronic nephritis.
Psychological Findings	Stanford, 13 yrs., 10 mos. Range through 10 yrs. Poor memory and reasoning. Erratic associations with phrases. Delayed reactions.	Stanford, 13 yrs., 1 mo. Erratic in tests. Fatigues very easily. Good reasoning, good motor control. Association test is irregular, slow in reactions.
Observations	Tells wild tales of her "fellows." Profane. Steals food. Lies. Walks in sleep.	Reported lazy. (Undoubtedly a physical basis.) Irritable, more so just before a bad headache.
Diagnosis: Level	Normal.	Normal.
Function	Constitutional psychopath. Probably on hereditary basis. Epileptic.	Somewhat psychopathic, probably due to physical condition.
Disposition	Industrial School for discipline and transfer to Hospital for Epileptics if necessary.	Paroled for placing in country.
Prognosis	Poor. Constitutional makeup, habits, poor training mean trouble.	Favorable. At least, there is hope.
Subsequent History	None available.	Getting along very well. Old trouble reappears when he stays home in the city long.

AGNES U.	DAVID T.	TRUMAN Z.
14 W F	12 W M	16 B M
Father shiftless, lazy, profane, of a poor quality family. Maternal family is intelligent. Oldest sib is neurotic.	Father's family unknown. Mother's side includes mental defect and insanity as well as people of high intelligence.	Mother immoral. Father unknown. Child illegitimate.
No untoward features. Has always been hysterical.	Had infantile paralysis at 15 months. Little else is known.	Nothing known.
Began at 6 and is in the 7th grade. Failed last year and this.	Began at 5 and reached 7th grade this year. Failed promotion this spring.	Reached only 6th grade in special classes and Industrial School.
Disobedient, quarrelsome, disrespectful. Truant from home and school. Associates with immoral persons. Has been under court care.	Lies, steals, incorrigible. Truant from home and school.	Has 8 years of court record. Persistent thief, taking anything from food to bicycles. Two terms at Industrial School.
Carious teeth, attended to. Tonsillectomy. Tests negative in every other respect.	Teeth suspicious but not typical. Hutchinsonian. Eye reflexes slow. Remnants of paralysis. Tests negative.	Stutters. Mitral regurgitation. Enlarged cervical glands. Had gonorrhea 3 years ago. Scoliosis and scaphoid scapulæ.
Stanford, 13 yrs., 5 mos. Association tests peculiar. Quality of tests most significant. Giggles, emphatic in speech and mannerisms. Dramatic.	Stanford, 13 yrs., 5 mos. Quality poor. Irregular on performance tests. Very inaccurate on school work. Superficial associations.	Stanford, 13 yrs., 3 mos. Poor in comprehension. Performance tests and school work surprisingly good. Psycho-motor control very poor.
Responds well to institution discipline. A problem at first. Lies.	Egotistical. Quarrels. Stubborn, rude, and saucy.	No insight into his delinquencies. Some of his ideas may be either racial superstition or delusions. Sees visions.
Normal.	Normal.	Normal.
Practically normal. Behavior may be result of environment.	High degree of psychopathy.	Somewhat psychopathic. Constitutional basis for this.
Paroled to sister for work.	Assigned to Industrial School.	Escaped from Bureau.
Questionable. Staff of divided opinion.	Poor.	Dubious. Not fit to meet complications of modern life.
Gave up good position, lazy, careless, impudent. Returned and found immoral. Sent to Industrial Home.	Not long enough period to give definite report.	Stole and caught. Sent to Industrial School again.

NAME	IRELAND L.	OMA T.
Age, Color, Sex	16 W M	14 W F
Family History	Maternal family is tubercular, alcoholic and immoral. Paternal family tubercular. Older sib used to run away. Younger sib "dull."	Father deserted, had lapses of memory. Mother could not support family, so placed children with the State.
Developmental Data	Instrumental birth. Normal development but many children's diseases. Has had tuberculosis.	Nothing known.
School Achievement	In 8th grade. Did 2 grades in a year in open air school.	Reached 7th grade. Stopped to go to work.
Behavior	Steals constantly from home. Truant from home and school. Lies fluently.	Left home to work. Mother could not control her. Has been immoral.
Medical Findings	Nutrition poor. Tubercular predisposition. Maldevelopment. Scaphoid scapulæ, round shoulders. All laboratory tests negative.	Defective vision. Teeth give specific indications, Wassermann weakly positive. All other tests negative.
Psychological Findings	Stanford, 13 yrs., 5 mos. Poor on any test involving actual concentration. Poor memory. Irregular performance tests. Poor quality associations. Motor control low.	Stanford, 13 yrs., 9 mos. Range through 11 yrs. Imaginal tests good. Healy test scored only 8 yrs. Reacts slowly. Deficient in motor control.
Observations	Adapts to institution life. No insight into his own obligations to his family. Egocentric.	Poor comprehension of her social status. Tries to meet boys. Lies. Good worker.
Diagnosis: Level	Normal.	Normal.
Function	Somewhat unstable. Offenses taken too easily by family.	Constitutional psychopath on a basis of congenital syphilis.
Disposition	May be able to get along, sent to Industrial School.	In a private training institution. Not committed.
Prognosis	Poor.	Questionable. Little chance for socializing.
Subsequent History		Has not been tried without supervision as yet.

NED K.	SAMUEL N.	ORMA S.
18 M M	14 W M	16 W F
Mother epileptic and immoral. Father unknown. 6 sibs. At least one steals.	Father alcoholic, immoral, had gonorrhea. Mother has a goitre. 3 children died young, 1 miscarriage, 1 sib had convulsions. Patient was first born and only one alive.	Father high-tempered, but easy going, inferior, in debt. His sib insane. Mother is of neurotic, immoral stock. Divorced. Father remarried and wife cruel.
Convulsions at age of 2. Been under State care for some time.	Early development negative. Masturbated excessively at 8 years of age. Circumcised.	Negative so far as known.
In 7th grade when he stopped at 14.	In 7th grade. Failed to pass. Began school at 6, but sent home as "too young."	Has reached 8th grade in country school.
No definite trouble. Wished study before placing.	Habitual truant. Runs away from home. Picks bad associates. Steals. Has 3 court records.	"Boy-struck." Accused of shooting step-mother with intent to kill. Lies. Immoral.
Incomplete. Negative so far as ascertained. Laboratory tests negative.	Nutrition poor. Carious teeth. Enlarged thyroid. Treated. Under size and weight. Teeth and bone anomalies. Laboratory tests negative.	Refractive error. Needs dental care. Nervous. Deep reflexes increased. All laboratory tests negative.
Stanford, 13 yrs., 4 mos. Memory very poor and interferes in many tests. Poor motor control. Quality poor in association series.	Stanford, 13 yrs., 10 mos. Wide range, good memory, careless work. Only 8 yrs. on Healy board. Association value very low. Forgets directions.	Stanford, 13 yrs., 9 mos. Success and failure mingled. Fails on reasoning and language tests. Variable on performance tests.
Good record in every way.	Comprehends what he is to do with difficulty. Loud, boisterous, seems inferior in behavior.	Good reports in all departments.
Normal. Some psychopathy. Hereditary predisposition.	Normal. Psychopathic on a constitutional basis. Syphilitic?	Normal. Slightly psychopathic. Has heredity, physique, and experience as a basis.
Try placing.	Industrial School.	Returned to local court.
Rather difficult to tell as observed only one week.	Poor. A social dependent not a social menace. Under institutional care.	Questionable. Too short a period of observation to judge.

SUMMARY OF FINDINGS IN CASES OF 23

NAME	VIRGIL N.
Age, Color, Sex	18 W M
Family History	Forced marriage of parents. Father deserted. Mother's family alcoholic and stupid. Mother a nagger. Step-father good.
Developmental Data	Normal. Always somewhat deaf. Peculiar since influenza, 2 years ago.
School Achievement	Reached 9th grade. Has failed in a good bit of work.
Behavior	Indolent, lazy. Arrested for exhibitionism and making wrong suggestions to little girls.
Medical Findings	Defective vision and hearing. Pigeon breast, scoliosis, lordosis, scaphoid scapulæ. Laboratory tests negative.
Psychological Findings	Stanford, 13 yrs., 4 mos. Wide range. Performance variable. Reasoning poor. Learning slow. Quality poor.
Observations	Good worker. No trouble in any way.
Diagnosis: Level	Normal.
Function	Somewhat psychopathic. Hereditary predisposition.
Disposition	Paroled to farm work.
Prognosis	May do well if trained three or four years.
Subsequent History	Has been getting along well. Happy.

These outlines are fairly indicative of the problems which the members of the group present, but in view of the fact that the individual who tests so high is apt to be held definitely responsible because of this level, despite the indications of the other findings on him, it seems wise to discuss several of the cases in complete detail. This may make them seem more like the individual problems met by the reader. As a matter of fact, such cases *are* individual,

DELINQUENTS OF ADULT MENTAL LEVEL—*Continued*

HELEN N.	XANDERS I.
17 W F	14 W M
Mother was immoral before birth of child. Maternal uncle was insane. Father is a drug addict. Was insane 3 times.	Parents of foreign birth. Poor home. Brother of 10 has been in court twice. Parents coöperative.
Not known save that the child was indulged and "spoiled."	Negative so far as known.
Reached 10th grade and then left school.	In 7th grade.
Immoral. Filthy in tendencies when angry. Ran away from home. Tried to commit suicide.	Incorrigible. Temper which makes him almost insane. Stays out late nights. Been at Industrial School.
Defective vision. Hyperplasia of thyroid. All other tests negative except Rosenbach which is positive.	Negative save for minor defects.
Stanford, 13 yrs., 5 mos. Poor rote memory. Poor generalizations. Verbalist. Irregular performance tests. Quality poor. Irregular school work.	Stanford 13 yrs., 4 mos. Poor vocabulary (origin). Good imaginal ability. Poor memory. Association test somewhat inferior.
Suspicious, intolerant, cries a great deal, dreamy.	No trouble. Adapts well. Does all required of him.
Normal. Constitutional psychopath with duplex determination.	Normal. Some psychopathy but probably due to irregular and poor living.
Temporary commitment, so returned to court. Advised careful placing.	Industrial School as it would give better training than his home.
Poor. Some paranoid traits now.	Know too little to say.
Not out long on probation.	Parents are moving to farm to give boy better chance when he leaves School.

varying constantly in the cause of their trouble, the way it manifests itself, and the possibility of helping it.

DAVID T.

David T. is a rather short, stocky, Russian Jewish boy, 12 years and 1 month of age. His face holds one's attention for it gives that impression of a mind alert, living, and doing, which always appeals. His shortness and stockiness may be partially related to his limping, a definite remainder from infantile paralysis.

Attitude. Throughout our work with him he was coöperative, overanxious to be right in his tasks, showing a good deal of concern about his record's being up to what it should be. This was a verbal attitude only and was unaccompanied by any actual show of anxiety. *More concern,* to him, meant *more verbosity.*

Family history. His father died 4 years ago. Nothing is known concerning his family. His mother died 9 years ago. Her brother states that she was unusually imaginative and loved the sensational. One of her sisters is of such low mentality that she is unable to care properly for her family. Two of this family have been tested and found to be subnormal. A brother of the mother is said to be "kept in seclusion on account of his mental condition." Two other brothers are successful professional men of good standing.

Developmental data. Little is known. David lived with a sister's family until a year or more ago, then he came under the jurisdiction of an uncle. He has stayed with first one relative and then another, being shifted back and forth as a burden of constantly increasing incorrigibility. He insists upon coming and going as he pleases, sometimes staying out all night. His meals are consequently irregular. He has reached seventh grade, having failed promotion because of inattention and misbehavior.

Economic history. He has never earned money. He makes the complaint that his aunt treated him like a girl and made him wash dishes and dust.

Behavior. Besides the irregularity of living, mentioned above, the boy is occasionally truant from school. He steals and then lies about the origin of his possessions. All toilet waters or perfumes must be kept under lock and key, for he insists upon perfumed baths. He constantly wears his uncle's best ties and when one, a very expensive one, was found beneath his mattress, he calmly explained that he thought he might need it some day for a party. He has never stolen money, although it has been purposely left in his way. He has taken clothing and tools which he knew would not be used or missed for a long time. Some of these he admits selling but refuses to tell what has become of the rest. He has stolen clothes from the home of a little girl whom he calls his sweetheart. He knows, evidently, all there is to be known about sex and talks about it freely. He is unusually vain, spends much time before the mirror, and "cried almost an entire day when his uncle threatened to cut his hair." If crossed,

he becomes stubborn and will stay away from home a day or two. He is generally thought to be peculiar but bright.

Earlier examinations. The court psychologist reports that although only 12 years of age he tests 13 mentally, passing many of the 14-year tests.

Medical examination. Eyes accommodate slightly. Middle incisors notched (not typically Hutchinsonian). Lateral incisors pointed. Has had infantile paralysis. Right side partially atrophied and right tendon reflex missing. Scaphoid scapulæ. Laboratory tests all negative.

Psychological findings. On the Stanford-Binet David scores 13 years, 5 months. His work is irregular. Although he has a basal year of 8, he barely passes the diamond in 7. He misses the weights in 9, design in 10, reversed digits in 12, and does the induction test, logical problems and differences in 14. In 16 he interprets the fables and succeeds on the abstract differences. Peculiarly enough, he succeeds on 6 digits backwards although he missed on 5. His answers are lengthy and verbally overadequate, yet his definite vocabulary rating is only 46 words.

Performance tests give him various levels. On the Seguin formboard his ability is average for 11 years. The Knox imitation series rates him 15, and the Healy completion gives him an adult level.

Anthropometric measurements indicate height, both standing and sitting, in the lowest decile for 12-year-old males, weight in the third decile, but grips and lung capacity proportionate to each other, and averaging 50 to 60.

Educational acquisition rates him variously. He is low seventh grade in literacy with a high percentage (21%) of inaccuracy. In language he is up to grade, geography is good, spelling is minimal seventh grade. In arithmetic, he has methods, but he is very inaccurate in calculations.

His general information seems almost unlimited, and details are quite accurate. The Kent-Rosanoff association test given on the day of admission is decidedly abnormal. Although he grasps the aufgabe readily and uses it correctly at first, it is soon lost. Consequently, irrelative words appear and the monoverbal answer is replaced by phrases. *The* is a frequent response at first, and 49 other responsives are adjectives of general complementary but non-specific type, such as *good, large, dark,* and *wooden.* His all-pervasive sense of his ego crops out in reactions such as *foot—his, trouble—his.* The average word value

for this series is only 40.[5] Repetition of the series after adjustment to institution life shows little adaptability, persistence of the same type of superficial, non-specific associations, and decrease in word value to 35.

Observation. Although David seemingly adapts to the exigencies of the situation and takes his part of the work cheerfully, his lame leg is made the excuse for refusing other than routine tasks shared by all boys. He "gets tired" very quickly. However, when one sees his energy at play in this tired state, the idea will creep in that it is probably more psychic tiredness than actual bodily fatigue. He is stubborn, a born leader in starting trouble, and fully capable of using all his intelligence to avert thoroughly deserved reprimands. He attempted to tell the boys in the cottage their diagnostic status, having stolen a confidential memorandum absent-mindedly laid down in the office by an important visitor. He is rude, saucy, annoys smaller boys, tries to start fights in the dormitory, resents all discipline.

Diagnosis. Bright normal in level with 8 of 10 indications of psychopathy. A well-developed case of Narcissism which would usually be diagnosed as an epileptic personality. The self-admiration, self-adornment, stealing confined largely to articles of adornment, frank sex interest, emphatic idea of his own importance, resentment of feminine household tasks, all indicate this type of complex. Some minor indications point to its being a compensatory development for his physical handicap. Its growth has been furthered by his actual superiority of intelligence which has never been conquered or even well-directed. It has been impossible to find an instance where the boy has been actually mastered in a way which has brought any realization of the relation which should, and must, exist between him, as an individual, and the social group. After the incident of his giving so-called diagnoses to the other boys, the writer definitely attempted to impress him with the adult view of his behavior. He had claimed his superiority over the other boys. He was shown his inferiority in doing such a thing, proof positive lying in the fact that he was so easily caught. After a long interview, chagrin and mortification made their appearance. This wrought

[5] This value is obtained by adding together all of the values for the frequencies of the individual words, and then dividing the sum by 100. The value does not exactly agree with the qualities indicated by a curve distribution, but it is highly useful in evaluating the changes in the test reactions of any one individual upon successive examinations.

such a change in his general attitude that it confirmed the recommendations already made tentatively, namely, assignment to the Boys' Industrial School for disciplinary training.

Prognosis. Poor. There is undoubtedly a constitutional psychopathy present which no discipline or analysis can eliminate. The family history indefinitely confirms this. The appearance of Narcisstic tendencies is an epiphenomenon largely due to the combination of physical handicaps and an environment filled with opportunities for such expression. Good habits of orderly living, recognition of authority and a consequent modification of his own attitude are all we can hope to achieve at present. If there were a hospital school for psychopathic children, where the above features were combined with psychoanalytic therapy, we would consider David ideally provided for. Even then one could not be too optimistic in this case. The question is one of whether habits can stabilize him sufficiently to overcome present tendencies and to insure normal behavior in the social crises he must meet, as he later attempts taking his place in the community.

Henry G.

Henry G. was first seen when 12 years and 10 months of age. He was very small and on first glance would have passed for a child of 9 or 10. He carried himself poorly, looked imbecilic, shambled hesitatingly into the office.

Attitude. His conduct on this day was stupid (despite test results). He wrote with a lead pencil on the examiner's desk, lost his way between adjoining offices and needed help in adjusting to simple apparatus. He had a senile look, his skin was coarse-looking, hair stiff and rather sparse, his eyes slanted slightly, his upper middle incisors were widely spaced.

Family history. The family is Scotch and came to this country when Henry was almost 6 years old. The father is rather high tempered, very religious, strict, but kind. The mother is quiet, gentle, extremely nervous, and subject to occasional severe headaches. They are buying their own home which, though small, is well-kept, convenient, and comfortable. Henry is the second born of 6 children, of whom 5 are living. One sister, the first child, died when 2 days old, cause unknown. History on the other 4 sibs is negative, save that John, 10, and Helen, aged 8, have "terrible tempers."

Developmental data. History of pregnancy and birth are negative. He walked alone and said his first words at 9 months of age. Age of teething is forgotten. Had whooping cough when a baby, measles and scarlet fever at 5, chicken pox at 6. Peculiarity, that is stealing, was first noticed by parents at the age of 8. He began school at 6 and has just reached seventh grade, having repeated sixth. He has always been exceptionally well-behaved in school and was never truant but once.

Economic history. Living in a small village, opportunities for earning were limited, but he has cut lawns, run errands, sold papers.

Behavior. He chums with boys slightly older than himself and is normal in his play and sport life. He is respectful to his parents, kind to his sibs. He can be given responsibilities. The only difficulty is his stealing. He has stolen, but only from home. This last winter he has run up a bill of $26 at the grocery store, appropriating the money his mother gave him to buy groceries, and charging the articles bought. This was possible because of the good standing of his parents.

Earlier examinations. None, but the principal of the school feels he is a bright boy.

Medical examination. Eyes show marked refractive error. Fundus examination: "Disc of each nerve has hazy margins, vessels full and entire retina shows islands of pigmentation. Degenerative state—disturbance in central nervous system. Stigmata rather than disease." Six-year molars are peg-shaped, middle incisors spaced. Knockkneed, flatfooted. Enlarged knee and elbow joints. Reflexes normal, Romberg not taken. Tonsillectomy. Vision corrected. Teeth attended. Provocative treatment was incomplete. All laboratory tests negative.

Psychological findings. At the time of the first examination Henry scored 13 years, 10 months on the Stanford-Binet. In this test he has a basal year of 9 and does all of the 10-year-level tests except the design, which is not drawn incorrectly but practically "forgotten." In the 12-year group he misses the ball and field and the 5 digits backwards. He passes all of the 14-year-level tests save the logical problems, in which he declares a snake hangs from the tree and the man rides in an auto. He passes the 16-year-level interpretation of fables and the problems of enclosed boxes. His answers are brief, and usually accurate. He admits ignorance when he does not know. His drawings are careless and poorly finished.

Performance tests mark him as inferior in those where motor

control is involved, for he scores only 9 years on the Seguin formboard and 10 on the Knox series. The adaptation series is passed without error. The Healy completion is done in adult fashion, and yet he scores only 9 years on the Porteus mazes, with poor quality of performance.

The anthropometric measurements place him in the lowest decile for standing height, below the minimal measurement for sitting height, weight proportionate to standing height, and grips and lung capacity showing fifth decile rating, that is, 50 per cent, or average ability. His head is meso-cephalic.

Educationally, his ability seems below what a boy ready for seventh grade should be able to do, although his literacy score rates him at high-school level. He cannot do multiplication by more than one number, and he fails on even simple short division problems, *but* does long division correctly, and passes almost any kind of reasoning problem involving money values.

His general information is detailed, accurate, and shows a wide range of orientation.

On the Kent-Rosanoff association test he gives a rather surprising distribution. There are only three individual reactions and a proportionately low number of others of low value whereas there are 48 with a value over 100. Thirty-nine of these are non-specific adjectives, but aside from this there is no peculiarity. The average value is 149. Reëxamination gives a curve which gradually shows less of the most common reactions, approximating the norm for boys of his age one month after the first examination.

Observations. This boy soon became a cottage favorite. He was reported as helpful, polite, earnest, and as spending all his spare time reading. A day or two soon changed the behavior characteristics noticed at first. He was no longer stupid but bright, alert, eager to help and please. He was soon made downtown errand boy and proved most efficient.

Analytic data. Henry's seeming earnestness and his cooperation were sufficient justification for an attempt at analysis. Gradually he traced his stealing back to his life in Scotland. He associated it with his grandfather's always coming on Saturday and bringing a big bag of sweets, and he wanted more of them than his share. He recalled in this connection taking fruits and such sweet things from home. Also, when sent to the store he'd tell his mother he lost a bit of the money, and would buy candy with the embezzled funds. Again and again this

idea of the desire for sweets came as the last of a train of ideas relating to stealing. When he came to this country, he continued taking things to eat, and gradually, as he found it possible, he took money, usually buying candy, sweets, and cigarettes, then spending the rest on movies, dime novels, and "trash." He has had five cents a week spending money, but it "wasn't even enough to go to the show." However, he justly states that he didn't expect any more, for his parents were paying for their home, and his father's work is irregular.

Diagnosis. Bright normal in level with 4 of 10 indications of psychopathy. The stealing seems to be definitely related to a stomach neurosis. Considering the boy's retarded physical development and various physical handicaps, it is not hard to believe that his own recall is the truth as he has lived it. The metabolic need led to the habit of taking when he was too small to know right or wrong. The habit, ingrained and reënforced by continued metabolic demands, continued and developed as he gained intelligence and "scope of action." Of course, this disturbance is in itself but a symptom, and psychologically the boy resembles our known congenital syphilitics, although only minor physical indications corroborate this.

Recommendations. To a family of such strict ideals of living, Henry's month at the Bureau was a severe punishment. The boy himself had this attitude, consequently it seemed well to consider parole. He had been put into good physical condition, tonsils and adenoids had been removed, eyes refracted, teeth filled. He had gained in weight. Morale work had been analytically reënforced and it seemed well to give him another chance, especially as the original complaint was not from the court but from the father.

Disposition. Paroled. He was to camp with Boy Scouts and work at his garden when home. Spending money of 25 cents a week was provided. He was to be returned upon first indication of delinquency.

Readmission. Exactly two months later he was returned in good faith by the father. He stole cabbages from another boy's garden, because, so he claims, the boy stole his watermelons. Later we found he had probably taken money given for schoolbooks and spent it. He also ran several small accounts at stores. We determined to observe him over a prolonged period, for no change in mental status evidenced itself at this time, save that the boy's attitude was much more like that reported at the first

interview. He was significantly unaffected by the disgrace of his return. Indeed, he seemed only glad to be back with us, although he reported a lot of pleasant home happenings. The association curve at readmission still approximated the norm. We entered the boy at once in seventh-grade public school, keeping him living in the Bureau cottage. Good behavior lasted one month (length of first observation), then trouble began. He objected to work in the cottage, preferring to read. He struck smaller boys, called names, destroyed combs, etc., in the lavatory, developed carelessness about his glasses, leaving them anywhere. Finally he began not returning from school and errands in time for meals. He told, at this time, a great tale of being hit and tied to a basketball pole in the school yard by big boys. He said no one passed while he was tied up. The next day (guilt?) he voluntarily brought another boy to confirm his story. He said to the matron that he wondered if his officer would believe him. Investigation proved he was, in fact, at a boy chum's house, across town, a privilege he could have had for the asking. Unfortunately, his troubles did not stop there. He became more impudent, refused to work, lied about minor offenses, was unduly interested in the girls, fought on the slightest provocation. Stealing did not manifest itself seriously although there was some opportunity.

Reëxamination. At this time, 5 months after the first examination, he was 13 years, 3 months of age. On the Stanford-Binet he scored 15 years. He passed all of the tests through 12 except the ball and field, all of the tests at the 14-year level, the same tests as before in the 16-year level, and the code in addition. The quality of his answers is like that in his earlier examination.

Performance tests show similar improvement, with formboard score 11 instead of 9 years, and imitation 14 instead of 10, but in the adaptation series he drops to a 7-year-level performance.

Anthropometric measurements give him a curve similar to the earlier one, although it is now compared with the measurements of 13-year-old boys.

The association series showed more individual reactions (8) and fewer common ones (34). The quality of the series seems normal. The average word value is 93, or practically identical with the normal.

Diagnosis. Earlier diagnosis confirmed. The question is, what to do with the boy. Regular food and living have been decreasing

the malnutrition, but there is a conditioning of behavior which has been so deeply ingrained that only a long period of training will overcome it. The boy's attitude is such at present that sending him to the Industrial School will but cause resentment and a feeling of injustice, yet no emotional affect has been obtainable through any type of privilege, scheduling, analysis, argument, or punishment. Something must make a contact between his intelligence and his emotions to "motivate" right activity. Physical handicaps have been corrected, parole tried and failed, spending money does not stop stealing, public school with institutional supervision gives too much chance for delinquency, analytic reeducation is ineffective, because all impressions made seem to be merely rationally comprehended with no effect upon conditioned lines of behavior. Finally the writer decided that this seemed to be one of those cases where fear might make the educational appeal which nothing else could. So one morning while Henry sat, apparently overlooked, in a far corner of the office, a letter was dictated asking the advice of a great surgeon on a peculiar case—that of a boy, intelligent, able, of good home and good family, who persisted in stealing and was developing other behavior difficult to tolerate in one who was surely "not feebleminded." We asked whether this might not be a case for a "brain operation," to try and save him for wholesome manhood, stating that we realized the gravity of such an operation but felt it was our last resort. An immediate reply was requested. Then the actors in the scene left the room. A few moments later an assistant "discovered" Henry, found no one wanted him, and sent him to the cottage, where he was closely watched, by special request, although attendants did not know the why and wherefore.

That afternoon Henry came in, presumably for an examination, and in a few moments showed that he was nervous, tense, and, *for the first time,* worried. He opened the subject himself and begged for another chance. Then calmly and impersonally his chances and failures were outlined, with the frank statement that it would take a long period of good behavior before any one could trust him again, and we could not keep him that much longer at the Bureau. Voluntarily he begged for a chance to make good at the Industrial School. This plea was received dubiously, and finally the privilege of asking it at Staff was granted. The next day in Staff the whole matter was presented by and with Henry. (So solemn was the discussion some of the Staff asked later about the type of operation!) Henry was dis-

missed, the therapeutic steps reported and assignment to the Industrial School approved. There he was sent, and made good in his record. It is now over a year since he went out on parole, and he is living at home, attending school, and still making good. Home conditions are even better than before, for his father has bought a small farm which keeps the boy employed outside school hours, and he is farther away from village gangs.

Prognosis. How much value our arousing a feeling of personal responsibility and a definite determination to make good by calling into aid fear as a motive has had, we cannot say. It may be the fortunate combination of all we tried to do for Henry which has made him one of our few cases getting along successfully. Even then it will take five years or more before one may feel sure the old tendency will not reappear. The behavior on admission and readmission was peculiarly like that of a deteriorating dementia, yet no definite indications of such a condition are found in the long periods of observation or in the examinations themselves.

The predisposition or diathesis which led into the first difficulty is still there, whether hereditary in type or merely congenital we know too little to say. The writer's own opinion is that the boy is a congenital syphilitic who will sooner or later give definite evidence of his instability. One point, however, this case does emphasize clearly—there is far more to the study of an individual than the application of a few tests.

Yates N.

Yates N. was a tall, rather sturdy looking boy, one glance at whose face gave one an impression that something was wrong. He was one month under 14 years of age. He seemed tired and depressed and yet did not act so. He coöperated well throughout the examination yet seemed emotionally indifferent to the whole experience.

Family history. The family history was gone over carefully with the mother, but little of etiological significance was found. Yates is the oldest of three children. The other two have been no trouble. The paternal grandfather has severe headaches. The father is well, works regularly, is a railroad man. The maternal grandfather was alcoholic. The mother is intelligent and cooperative. The home is good in every respect.

Developmental data. Birth and early development were normal. The child was never ill save with measles and whooping

cough. At 4 years of age he began telling wild tales. He began school at 5 years and has reached 8B in a special vocational school.

Behavior. He has always told the wildest yarns imaginable. The "lies" do not necessarily depend upon fear of punishment but are often without seeming provocation. He cannot be trusted with money and is never shamed by discovery of his thieving. He respects his father but has lately been insolent to his mother. Truancy has developed this last year. Yates plays little with other boys but spends most of his time reading, or playing the violin, on which he performs quite well.

Earlier examinations. None.

Medical examination. Nutrition good. Hemoglobin 80 per cent. Refractive error has been corrected. Has had mastoid infection in left ear. Incisors spaced but shape normal. Has had tonsillectomy. Reflexes are diminished and unequal. Rosenbach is positive. All laboratory tests are negative except urinalysis. Chronic nephritis?

Psychological findings. On the Stanford-Binet Yates scores 13 years, 1 month. With a basal year of 9, he fails only the 60 words in 10. In 12 he fails on the ball and field, interpretation of pictures, and similarities. In 14 he does only the vocabulary, induction test, and the alternate repetition of 7 digits. Above this he interprets the fables, repeats 8 digits forwards and 6 backwards.

The performance tests in general he passes with ease, scoring 14 on Knox series, passing all of the adaptation series, making a perfect score on Healy completion, but falling down to a 12-year level on the Seguin formboard. This is entirely a matter of speed and not of deficient ability in form comparison.

Anthropometric measurements show him to be almost as tall as the tallest 13-year-old but with low sitting height. Weight is proportional to standing height and psychomotor control is proportionate to them both.

On literacy, he rates at the 50 percentile for tenth grade. His arithmetic is below third-grade performance on the Courtis tests. Spelling rates him at sixth grade. Language and geography are about up to grade.

His general information is about average for a boy of his age and social level.

The association series shows quite a high number of individual associations. By the use of even a good imagination some of them cannot be classed as normal, for instance, *spider—ink,*

carpet—fruit. Sound associations also appear. Repeated examinations show the same tendencies.

His story illustrates his attitude. He admits stealing, says it is usually when he has a headache and feels bad all over, about every two months (confirmed). Says he is not ashamed for the things he has done "because it doesn't do any good." As for his tales he "never saw a boy who didn't do that."

Seven weeks later he was reëxamined. He then scored 15 years, 4 months. He passed all tests through the twelfth year, all above that that were done before and in addition, the logical problems, clock, cut design, and 7 digits backwards. The Stanford is done with far better quality and greater ease. The fatigue incident to earlier work is less marked.

On literacy and association series there is no change.

Observations. Most of the time Yates reads, but when so inclined he becomes very troublesome. He defies authority, fights, torments younger boys, sulks if made to perform any tasks. Care has been taken to see that work was not assigned when he felt badly.

Diagnosis. Normal in level. His function is somewhat psychopathic but this has decreased even in the short time he has been in the Bureau. As there is the physical handicap which surely accounts for his "laziness," we must give him the benefit of the doubt and see whether continued care, with regular living, will not decrease the other symptoms.

Prognosis. Fair.

Disposition. Paroled home to be kept under observation of a specialist for kidney disturbances and to be placed on a farm.

Subsequent history. Has been getting along well on grandfather's farm. Was tried at home a short time during the winter but played truant, or refused deliberately to attend school, so went back to the farm where he does nicely. His physical development has been very rapid, and he seems well and strong, although he "occasionally" has headaches. Although the parents planned to have him receive a much more extensive education, they have met the situation wisely and are encouraging his liking for farm life and work.

Agnes U.

Agnes U. was not a very attractive girl when first brought in to us. You have seen her like on any Main Street in the small town, and in the nonfastidious movie of the big city, gum chewing,

slouchy, slangy, with extremely dressed hair, and an "effect" of clothes which is but partly achieved, because of the need for better food, regular bathing, wholesome work. Washed and shampooed and dressed in a plain blue chambray dress, a second day's inspection was still disconcerting. Then she looked like a worn-out, starved monotone of what a girl of 14 should be. Her own discomfort in the change showed in her ill-at-ease giggle with an assumption of bravado now and then. Agnes—could reconstruction justify her name?

Family history. The hereditary handicap reported was not light. The father is a shiftless, lazy, profane man, a miner by occupation, who feels no parental obligation. His whole family is reported as of "doubtful mentality." The mother is dead. Her family is said to include professional people. The grandmother is reported as having been a good practical lawyer (?). An uncle is a captain in the army. The sister who is 24 is married and runs her own home. She is rather neurasthenic and impresses one as weak-willed. Three brothers of 18, 12, and 9 have given no trouble.

Developmental data. Agnes had an uneventful childhood. She had most of the minor diseases but no serious illness. She has always seemed careless, rather destructive, and "hysterical," according to the sister. Her school life began at 6, and she reached the seventh grade without difficulty, but failed to pass it both last year and this. She has been truant through these last two years.

Behavior. If truancy were the only complaint there would be little difficulty in adjusting matters, but the girl leaves home without the consent of her father. She spends her time with persons known to be immoral who have a bad influence on her. She is idle and resents any supervision. The local court tried parole supervision but it was ineffectual.

Medical examination. An entrance medical examination showed good nutrition, carious teeth, adherent tonsils, chronic conjunctivitis, knockknees, flat feet. A neurological examination was negative. All laboratory tests were negative. Teeth were X-rayed and attended to.

Psychological findings. The psychological examination disclosed a mental age of 13 years, 5 months. All tests up to and through the tenth year were done readily, but she missed the ball and field and similarities in the twelfth year. In 14 she missed the vocabulary, induction, and clock problems. Above this level

she does the 6 digits backwards and repeats the content of selection read (18-year level). Her tests show no peculiarity of quality.

The performance tests show no disturbance in that aspect of ability.

Anthropometric measurements place her in the highest decile for standing height, but only in the third for sitting height, and the fourth for weight. Both grips are fourth decile in value, but lung capacity, despite short body, is up to ninth decile.

School tests show about fourth- or fifth-grade ability in English, spelling not above minimal sixth-grade achievement, geography entirely satisfactory for seventh grade, literacy average for eighth grade. Arithmetic is rather inaccurate but almost up to average for grade.

General information is fairly good but limited in range.

The Kent-Rosanoff association test shows inability to retain the aufgabe, with consequent usage of phrases. Aside from this the reactions are most common and of high value, the average value being 152.

Repeated tests show little variability.

A month later the Stanford was re-given with a mental age of 13 years, 7 months. The distribution is similar to that of the earlier examination, but she fails on both 5 and 6 digits backwards this time, and on the arithmetic problems in 14. She shows gains on the enclosed boxes, the ingenuity problems, and the similarities.

Observations. She chooses the worst girl in the cottage for her bosom friend. She is surly, churlish-natured. She does not like to work, but soon adapts, and becomes a trustworthy helper. Does not get along very well with girls.

Agnes' story is as follows: After her mother died her father was cruel to her, made her work too hard, would not let her have any girl friends, cursed her, and refused to buy her proper clothing, although he had money to do so. She wore the same dress to school all last year, and when it was soiled had to wash it out at night. Her aunt came to keep house, and as she and her father quarreled constantly, Agnes was between Satan and the saltwater. "How could I mind when I had two or three bosses all pulling in opposite directions?" She knew disobedience might mean the Industrial School but "anything would be better than home." She declares she likes best to go to church and wants to be a missionary or a nurse!

Diagnosis. Normal in level with function practically normal. Minor indications of psychopathy are not sufficient to modify disposition.

Recommendations. There seems to be good reason for giving the girl the benefit of the doubt. Her delinquency has appeared since the home lost the mother, and there is enough against the father to justify the girl's interpretation of the situation, although the artistic touch of wanting to be a missionary or nurse shows her tendency to plausible lying. The sister wants to try her in her own home, so we will give parole opportunity to make good.

Prognosis. The pessimism (?) of part of the Staff leads to the statement that there is little chance of her succeeding for any length of time.

Subsequent history. Seven weeks later Agnes returned. The sister had refused to keep her any longer. Agnes had had a good position but could not hold it. She was impudent, saucy, boy-struck, sought wrong companions. The physical examination made at this time revealed definitely that she had been immoral. Full corrective work which could not be afforded before was now done, eyes refracted, and tonsillectomy performed.

Psychological examination. On the Stanford-Binet she scores 14 years, 1 month. She shows even lessened ability in rote repetition of digits, missing 7, and fails on the comparison of President and King, which was formerly done. Her gain comes, because of repetition probably, on the arithmetic problems, the fables, and the cut design. Performance tests show lessened ability. Seguin score is 11 years instead of 13, Porteus score is only 10.

Anthropometric measurements show increased weight and improvement in both grip records.

The association test has even more common reactions than before. The average word value is now 153. This is the type of distribution we have sometimes found in beginning deteriorations, and that is the tendency here, correlated as we find it with decrease in rate and actual ability on performance tests, and dropping down on rote memory tests on the Stanford. The test attitude is also different. The girl is spiritless, quieter, somewhat "tired" seeming. The association curve continued gaining in common reactions until at the end of our study the average value was 200.

Observations. Agnes seemed so capable, potentially, that despite the sex history we decided to keep her indefinitely, fitting her into one of three positions we were allowed for keeping

children and paying them a small wage. At first she did fairly well. She was scheduled half time as cottage helper and half time as relief on a simple switchboard in the office. Soon dubious reports began coming in. She was careless in her work, not thorough or neat. She told wild tales of her future plans. She bragged in the cottage about her special office privileges (without basis), and was cross to small children. Lied. Fought constantly with lesser employees (of about her own mental caliber). Time and again she was reprimanded, corrected, privileges removed, but trouble continued until she used every opportunity possible to make acquaintance with men on the outside. She even contemplated eloping. After repeated trials for four months, the Staff agreed it was not right to give her any further chance when more hopeful cases were in need of the limited service we could give.

Disposition. Assigned to Girls' Industrial Home.

Prognosis. Poor.

The thought can hardly help passing through the reader's mind, "These are the most interesting and unusal cases of the group," but indeed it is hard to choose between those reported in detail and those not. We have the spectacular case of Naomi who came in suspected of feeble-mindedness and had won a year's free fellowship at a good art school within a few weeks thereafter, purely on the merits of her own untaught efforts. Yet to-day Naomi is far from a successful case. She has had periods of mental confusion and dependency, through which only the kindly personal efforts of those who were responsible for her as a juvenile, but whose responsibility was definitely removed by her twenty-first birthday, have kept her supervised until she could gain health to go on a little while again. There is Marie who writes poetry and lives a life of romantic attention to every man she sees; Queed, whose wanderings as a living dictionary have taken him half the distance across the continent; Roswell, a chance victim of society's tolerance of vice; Ida, whose own experiences equal any tales one wishes to hear of dependency, immorality, and sodden

married life. What more could one meet in everyday life? The group represents the level of the group among whom we have to live. It represents also the handicaps, tragedies, romance, sordidness, glamours, and the humor of the world we know. Let us emphasize the significance of this group. *They test normal. They are abnormal,* or *a-normal.* How can the two statements be reconciled? Merely by a recognition of the fact that mental age is not in itself any guarantee of normality. Beyond mental level lies the whole field of functioning, of efficient usage, of probable disturbances and deviations. This is the reason we find those who are normal, but—.

CHAPTER XVIII

INTELLIGENCE PLUS DELINQUENCY

THE individuals who score above 14 on the Stanford are, so far as there are any statistical criteria, above the average rating of the social group. In this study there were available a total of 369 children. Of that number but 23 scored between 13 and 14 years in level. These individuals have been reported in detail. Thirty-one others scored even higher on the intelligence ratings. These 31 are, because of their higher level, more certainly normal in the amount of intelligence with which they are endowed. The person who refuses to acknowledge 13 years as average adult endowment has less cause to complain of the classification of this group as "normal." Yet this very group forms the quintessence of the difficulties which the 369 cases managed to demonstrate in court, in homes, in the community, and under institutional régime.

BETWEEN 14 YEARS AND 14 YEARS, 11 MONTHS MENTALLY

There are 12 who scored at this level. They are all between 13 and 17 years of age, and 5 of the 12 are girls. There are none but native-born whites in the group.

I.Q. Their intelligence quotients range from 111 to 83, with all but 4 of them over 90.

Delinquency charges. The offenses enumerated against this group include stealing in 6 instances, immorality in 5, incorrigibility in 3, and forgery, cruelty, and laziness in individual instances. Additional delinquencies appear as the cases are investigated, but these were not in the original charges. These accessory indications of trouble are more

apt to be wandering from home and persistent pathological lying than anything else.

School grades. There is none of the group who has not reached at least seventh grade, whereas 2 have finished tenth grade. The average is 8.3 grades of accomplishment, with a deviation of less than a grade.

Stanford range. On the Stanford this group is not capable of very high basals. There are 5 with a basal of 9, and 5 with a basal of 10. One goes back to 8 for a basal, and 1 has a basal of 12. All but 3 do tests in the 18-year level, and these 3 do tests into the 16-year level. Consequently, the number of years of range above basal averages 8, with a deviation of less than a year.

Stanford distribution. The tests failed on vary somewhat in their relationship to each other from what we find in the groups testing below 13. The weights is the only 9-year-level test missed. The design and the reading are hardest at the 10-year level, the ball and field at the 12-year level. In the 14-year group of tests the comparison of President and King, and the repetition of 7 digits are both missed 8 times out of 12. The vocabulary is the next in difficulty, whereas the induction test is the easiest of all. Vocabulary is the hardest test at the 16-and 18-year levels, and the fables and the cut design are the easiest at their respective levels.

Stanford quality. The quality of the test performances is not as markedly abnormal as with lower level groups. The intelligence of these individuals is too high for the tests to make difficult enough demands upon it to bring out abnormalities in any marked degree. However, there are motor-control difficulties in drawing the diamond in 4 instances, and abnormality in design production in 6 instances. Similar trouble shows in the code and the cut design occasionally. Verbal tests bring out idiosyncrasies in several instances.

Association distribution. Of course, all of this group succeed in meeting the conditions of the association test, although there are anywhere from 1 to 20 phrases in the reactions of two-thirds of the group. Individual reactions range in frequency from 2 to 14, with only 3 individuals giving over 10.

Association quality. The association quality is of far more importance. In practically every case it was a reliable and definite mirror of the complexities and difficulties of the individual's life. As such, it was tentatively taken as one guide to common sense analysis. Unfortunately a great deal of such work could not be done, even in the cases which needed it most. This was not so much a matter of the limitation of time of observation, as a matter of the inability of the individual to coöperate. Despite the general warning of analysts that certain types of individuals cannot be analyzed, no such an inability was assumed in handling any case, but a practical test of his inability was itself made the basis for giving him such aid or withholding it. In other words, each child giving indications of the presence of complexes was analyzed to the point where lying, hysteria, inability to comprehend, or indifference prevented further work. As a result, much time may be said to have been wasted, but it was wasted with the result that the examiners definitely knew that the limiting of further work was justified by the limitations of the individual himself.

Performance tests. On performance tests this group varies considerably. The Seguin formboard shows a variation in score of from a 9- to a 14-year level. None fails to complete all of the moves on the Goddard adaptation board. The imitation series places one at an 8- and one at a 10-year level and all of the rest at from 14 to 16 years of level.

On the Porteus the range of ability is from 8 to 12.5 years, with an average age of 11 and a mean variation

of a year. On the Healy completion board the scores range from that equal to a 5-year level to an adult performance. The average performance is 11.5 years with a mean variation of 2.9 years.

School performance. In school work the group varies as greatly as in other tests. The literacy scores range from 21 to 45, with an inaccuracy ranging from 0 to 25 per cent. In arithmetic, all save 2 do about fifth-grade work as a minimum. These 2 do but poor third-grade work. None does less than seventh-grade language work save 1, whose reactions are so delayed and inhibited that tests are of dubious value. This individual does about fourth-grade geography, and the 2 who are so poor in arithmetic do about fifth-grade in that subject, all of the rest scoring sixth- to eighth-grade. In spelling, none scores less than seventh-grade, save the same 2 who are inferior in other branches.

General information. In general information, the group has a normal record with one exception. This is a girl who has had the chance to learn a great deal but who seemingly absorbs nothing to which she is exposed. The failure on this test is indicative of her failure on everything in which she has been tried.

Own story. Their stories are indicative of some disturbance in all but 2 instances. Persecutions, adventures, mysteries, and crimes abound in them. Investigation reveals that without a doubt the owners have made use of their full quota of intelligence in interpreting their past experiences, for lurid and hectic reports fall into commonplace experiences when impersonally determined.

Behavior under observation. While under observation this group was seemingly normal in behavior. An attendant, or a matron of the usual level of intelligence would report most of them as well-behaved and coöperative. The observation of their actual deviations from good behavior

required a trained individual. The group may be characterized as being verbally acquiescent. They seemingly fit into the situations they meet. Their intelligence enables them to veil their own deviating desires. They are not frequently caught, and when they are, they still have a resource for escape, their superior ability to explain away their behavior.

Otto X.

Otto X. is perhaps the best example of this which the group of 12 affords. He is only 13, up to grade in school, above normal level on the tests. He is attractive, well developed, really handsome, with his enormous dark eyes, long black lashes, and a normal pallor seldom found save in Jewish children. His manners are those of a courtier. He introduces his mother to the Staff with an ease adults might envy. His conversation is intelligent, and he assumes adult views and expresses them in a way that holds one's attention. A stranger meeting him for the first time would not suspect that he was other than a normal boy of superior intelligence. One person working with him day in, day out for several weeks was misled by his casual explanations of most troublesome behavior. In all he says and does, however, there is present an egotism that is the secret of the difficulty in handling him. He has always proven self-sufficient. Although he has a real love for his mother and *habits of respect* which a good home has drilled in, yet he is contemptuous when she tries to discipline him, and tries to evade issues by verbally acquiescing. Such episodes do not modify his behavior fifteen minutes later. A lawyer might well admire his linguistic ability which so often appeases wrath, is taken to mean promise of atonement, and which yet leaves him untrammeled by any actual disciplinary measure. This is a functional disturbance which precludes normal adult life unless it is checked and corrected.

The other eleven have more or less resemblance to this case. Some have come under public care because they are more menacing in their proclivities, and not only protect themselves and their acts with agility, but extend their stories into the field of accusation of others. In a way, a

goodly part of the other offenses of the group grow out of this tendency to superficial and *verbal adaptation* to life. The boy who forged merely put onto paper his assumption of power he did not possess. At least 3 of those who stole felt it a justified need. They could not carry out their attitude of superiority, since they needed objects to confirm it or strengthen it. These they acquired by stealing. In general, the delinquencies of the whole group seem to be the expressions of inferiorities felt and compensations attempted. From the standpoint of the community the group seems less troublesome than the 13-year and lower level groups. The stealing is confined to the home in most instances. The home made the original complaint in most of the cases. In at least half the cases, the families are well-meaning and coöperate in handling the child. The higher mental level of the cases has a tendency to mean more self-control. Even though it is superficial, it is enough to enable the individual to *appear* as the rest of us, in the ordinary contacts with the group. This superficial compliance with convention and law finds no counterpart in the child's actual life. Camouflaged and evasively indulged in, his abnormality is just as definite and serious as that of a more candid lower level offender. Indeed, it is more serious. The intelligent offender evades suspicion and detection for a longer time. He has a longer time to develop his wrong habits. He gains more confidence in his ability to evade detection and punishment. His wrong-doing deviates farther and farther from right behavior. At last a major offense brings him to justice, too late for his own good, too confirmed in wrong habits of thought and wrong behavior to be easily remodeled into a good citizen.

Medical findings. Physically, the group gives indications as marked as those found in the lower level children. These 12 are not well-balanced, well-nourished, "sound" individuals. Two of the 12 are known congenital syphilitics. One

of these has been immoral, but the presence of structural stigmata indicates that this behavior is more apt to be a result of the instability, due to the presence of syphilis, than that the syphilis is a result of the immorality. These congenital syphilitics have marked disturbances of the patellar reflexes and poor teeth. One case has very poor vision and is deaf. The other 10 have decreased or increased patellar reflexes in 8 cases, defective vision in 2 instances, bone abnormalities in 2 cases, and minor stigmata of inferior development in practically all of them.

Morphological measurements. Anthropometrically, the group is not homogeneous. There is a sub-group that is barely up to average height and another group which is above average in this respect. The whole group is low in sitting height, although here again there is a double distribution. In weight, grip, and lung capacity the same dual tendency is discernible.

Heredity. The heredity of this group is not "clear." In 2 instances the insane diathesis is direct and definite. In 2 others there are reliable histories of syphilitic infection with its effect upon the whole family group. Four other families are definitely neuropathic, with nervous difficult mothers, irascible or peculiar fathers, and epileptoid qualities in some members of the family. In 2 of these cases the father has died, and the mother has to meet the needs of her family alone. One family has a definite criminal record, another is inferior throughout, and in one instance both parents are dead. The other family has a doubtful history of intermingling tuberculosis and alcoholism.

Diagnoses. How could one diagnose a group such as this? They are normal in level, but in each and every instance a qualifying phrase must be added. One boy seems to be without any mental instability but he has been poorly handled and needs definite help along lines of reëducation. Five show marked indications of psychopathy, marked

enough to make correction dubious. Two show numerous indications of some type of deterioration. Both of these cases have been worked with intensively without improvement. One gives a 4 plus Wassermann, and the other is a syphilitic suspect, although all tests have been consistently negative. One case is practically a pathological liar with a marked sex and family complex, yet it does not yield to analytic treatment. Two others are psychopathic and of the type which we recognize as predements. They have mild delusional content but it is unorganized, and not entirely without a suggestive basis in their own experiences. They are hysterical. One is highly euphoristic, the other is paranoid. Both are entirely undependable. The group is not a hopeful one in any way.

Between 15 Years and 15 Years, 11 Months Mentally

When we turn to a study of the 15-year-level group, we find a highly similar condition. Thirteen of the 369 tests at this level, 8 boys and 5 girls. The group does not seem, when one views them in the light of experiences with them, to be much more intelligent than the 14-year-level group, and they are equally troublesome, if not more so. To briefly summarize the findings with them:

Age, sex. In age they range from 13 to 18 years with an average of 16. One boy is a mulatto, but all of the others are whites of native American stock.

I.Q. Their intelligence quotients range from a lower limit of 93 to a score of 115.

Delinquency charges. The delinquency charges for the group are serious and manifold. It seems wise to enumerate them in detail.

1. Runs away. Steals. Writes vile and immoral notes. Poisoned a valuable dog. Rides freights. Threatens people. Tried to shoot up the town with a revolver. Has been at

industrial school three times and each parole his "conduct is more grievous."

2. Sly. Lies. Steals. Runs away. Thinks he is an electrical genius.
3. Lies. Steals. Forges. Hysterical and immoral. Tried suicide.
4. Stole auto. Incorrigible. Other stealing charges.
5. Immoral and also homosexual. Seeks men everywhere. Acknowledges promiscuity.
6. Steals. Stubborn. Actually uncontrollable in the community. Runs away. Very quarrelsome. Lazy at times. Not dependable for any sort of work.
7. Stayed away from home over night. Immoral.
8. Always been obstinate. Truant from home and school. Numerous thieving episodes. Industrial School three times. Lies.
9. Victim of rape. Girl appealed for help, of own accord.
10. Immoral. Diseased. Runs away to be with men. Obstinate. Temper.
11. Steals. Lies. Ungrateful and unmanageable. Stays out late nights.
12. Runs away from home and schools. Married a practically strange girl recently. Is a minor. Steals. Grandiose ideas.
13. Steals all sorts of effeminate articles. Homosexual and has been accustomed to perverted practices. Thinks he is an artist.

School grades. The group ranges in school accomplishment from sixth to eleventh grade. The average is 9 grades finished.

Stanford range. The range on the Stanford is proportional to that of the lower mental levels. Only 3 pass all tests through the twelfth year, 4 have a basal of 10, 3 have a basal of 9, and 3 have basals of 8 years. All but one do tests through the eighteenth year.

Stanford distribution. The distribution of failures is not highly significant. Below the twelfth year they are scattered. The ball and field and the reversion of 5 digits are the most difficult for these higher level cases. The vo-

cabulary and the repetition of 7 digits are the most difficult of the 14-year-level tests, although they are nearly equaled by the scores on the differences between President and King and the problems of the reversed hands of the clock. The vocabulary at 16 is passed by only 1 child, and the next most difficult task is the repetition of 6 digits backwards. At the 18-year level the only noteworthy facts are the ease of the cut design and the repetition of the thought from passages read. The first of these is passed by 8 of the 13 children and the latter by 7.

Stanford quality. The quality of performance on this series is practically normal throughout, although drawing tests give one or two indications of pathological trend.

Association distribution. The association test is given successfully to all of the group. Eleven of the 13 give phrase reactions. The number given varies from 1 to 14. All of the group give other single word reactions which are individual. These range in frequency from 3 to 25.

Association quality. The test shows practically every one of the individual traits of the various individuals. Inferiority, sex interest, pessimism, ideas of persecution, sullenness, discouragement, race complexes, are all revealed. These were a tremendous help in corrective work.

Performance tests. In performance tests some of this group show significant defects. On the Seguin formboard there is a range from 8-year to 14-year scores, with an average performance of 12 years. In the adaptation test all score perfect except one who can do only the 6-year-level turns. On the imitation series the scores range from a 7- to an 18-year level, with an average score of 14.4 years. Only one individual scores below the 10-year level, and this is the girl who scored only 6 years on the adaptation series. On the Porteus series the performance ranges from 11.5 years to a 14-year level. In some of the cases the quality of the performance is very erratic and peculiar.

In the Healy completion test the scores range from a 6-year level to an adult level, the variation being so widespread that an average is misleading.

School performance. On the literacy, the group ranges in score from 29 to 39 points. The general inaccuracy is low, ranging from 0 to 16 per cent, with only 3 scoring over 10 per cent of errors. They are much poorer, however, than even the 14-year-level group in arithmetic. One can barely do second-grade combinations, 3 barely pass third-grade work, 1 does fourth-grade work, and the rest would be credited with full-grade accomplishment. In geography, all achieve at least a fifth-grade average and the mode of performance would give them credit for the completion of eighth grade. Language is somewhat poorer with a range of ability from fourth to eighth grade, but with an average achievement of only 6 grades. In spelling, they range in ability from fifth to eighth grade with an average of 7 grades of work accomplished.

General information. With three exceptions the general information and orientation of the group are good. These three individuals were all too definitely psychopathic to be in any normal relationship to their own environment.

Own story. In telling their own stories, 7 of the 13 give marked pathological indications. Paranoid ideas, grandiose loquacity, extreme affectation, perverted sex mannerisms, lack of affective tone appear in obvious form, as well as actual delusional content.

Behavior under observation. Under observation the group is difficult to handle. They are intelligent enough for working with them to become a daily battle of wits. They aim at their own satisfaction, and have no code of honor to be violated in achieving it. They are egoists in all but one or two instances.

Medical findings. The medical findings reveal little wrong with most of them. One was a marked case of vago-

tonia and delayed maturity which yielded remarkably to the feeding of testicular extract. Two were congenital syphilitics, one with a positive Wassermann, the other negative but with a definite history and laboratory tests corroborating the father's condition. Two others had small goitres.

Morphological measurements. Measurements indicate a group which is well above the average in its standing height, about average in distribution for sitting height, definitely above in weight, and, with two or three exceptions, equally superior in grips and lung capacity.

Heredity. The heredity cannot be blamed or eliminated in some of the cases. In one case nothing is known save that the boy inherited syphilis. In another case the family tree is clean save for the early youth infection of the father. Three histories indicate families of doubtful standing, but certainly inferior in some ways. Three families have an inheritance of insanity, and three others are neuropathic to a high degree. Criminality is present in one family, and little is known of the other two.

Diagnoses. This group may be definitely diagnosed as normal in level on the Stanford-Binet, and most of them are fairly normal on the majority of the other tests given, but the behavior, the quality of the test findings, the orientation defects, the tales of their own experiences, point away from a plain unmodified diagnosis of "normal" in most of the cases. The girl who appealed for help of her own accord is undoubtedly normal. The boy who was under gland feeding seems to be becoming normal. Two others have reached the stage of permanent commitments to state hospitals. The others have been sent to industrial schools, handled here and there in an effort to give them what the state does not provide—prolonged treatment as psychopaths. None of them seems to be surely on the road to future normality. Perhaps a story of a case will best illus-

trate the complexity of the problem as each and every one presents it.

Opha Y.

Opha Y. was perhaps the most interesting case the Bureau ever handled. For one thing, Opha's whole personality seemed so different, to the casual observer, from what her history would lead one to expect that that alone made her worth studying. At the time she was committed she was 16 years and 8 months of age. She was tall, slender, graceful, and extremely well-dressed. Her face was rather piquant and rendered striking by the carefully thinned and highly arched eyebrows, the wonderfully coiled and waved hair, the skilfully applied rouge. In manner she might have been a society woman of forty, with the hauteur which comes from a knowledge of exclusive position, money, prestige. Her voice did not spoil the picture. When she was taken to our cottage and introduced to the matron, she grasped the poor woman's moment of blank amaze and kindly assured her that she was sure they would be good friends!

Heredity. The father, himself, placed the original court charge against the girl, over two years ago, when they found it impossible to handle her. He is a well-meaning, skilled laborer and is much interested in Opha. He has recently been divorced by the woman. He drinks but shows little effect of the liquor. He is reported as high tempered and quarrelsome. At the Bureau he told varying stories to various people, was hypersuggestible, easily excited, temperamental. He was sensible but not stable. The mother was supporting herself at this time. Significantly enough, despite her husband's very high wages, she had been unable to secure any alimony. She has since married again. She does not understand the seriousness of the girl's behavior and constantly harps upon having her home. Her letters to the girl are very emotional and highly sentimental. She admitted to a responsible probation officer, three months ago, that she and her husband had syphilis before this child was conceived, and the baby was covered with sores. Now she says this was gonorrhea. Our physician believes the child's condition was merely a temporary illness. There is one other daughter, two years older than Opha. She was a stenographer and held a good position. She since married. Nothing else is known concerning the family, save that the maternal grandmother was tubercular and her husband alcoholic.

Developmental data. Opha walked at 14 months, talked at 2 years. At 3 years of age she was badly frightened. She caught fire and had several serious burns. She has had mumps, chicken-pox, and diphtheria. The mother thought she was all right until 12 years of age; was lovable and attractive until that time.

School progress. Opha completed the grades but did not like school very well. Would have had to repeat seventh and eighth grades if she had not gone to summer school. Had some business training after completing eighth grade.

Economic history. Opha has held many positions and has been found unsatisfactory wherever placed. She has forged working certificates again and again, giving her age as 19 or more. She was examined by one of the psychological laboratories in C . . . . and placed in one of their own offices. There she forged signatures to records and erased entries on her own case record, explaining that the entries were not true, and she knew they wanted only the truth. She "lost" important data, later discovering it in bad condition. There and elsewhere she has been a constant annoyance because of boasting. She claimed to be married, showing a wedding ring. She blued circles under her eyes, blackened her forehead to simulate a bruise, had spells of weakness. At Christmas she gave away dollar merchandise orders freely although earning only $7 a week. She changed sales checks and proved incompetent as well as unreliable.

Behavior. Opha's real trouble is said to have begun a little over three years ago. She fell against a chair and hit her breast and blames that for her heart trouble. About that time she tried to commit suicide by turning on the gas in the bathroom, and the physician summoned to attend her reports that she was actually as much of a problem then as now, and that her mother did not know how to manage her. Two years ago she ran away from home, stayed at hotels, and allowed a man whom she "was thinking of marrying" to pay her bills. She went to a neighboring city with another man and admits attempted intercourse with him, *but* all the details of the hotel, location, and man's name have been proven absolutely fictitious. She worked spasmodically, and finally, by the father's efforts, was returned to her home and then placed in a resident school. In a few days she was sent to a hospital because of her heart symptoms. From there she was sent to a convalescent home from which she was discharged as a disturbing element. Back once more in the community she sought excitement. She published her own death notice, sent

herself telegrams, carried a revolver for protection, worked under various aliases, bought clothes and charged them under an assumed name, sent herself gifts, wrote letters supposed to be from a French girl, addressed envelopes filled with blank paper to soldiers, stole many things, had frequent spells on the streets necessitating being taken home in taxis, constantly tried to look dissipated, and proved to be a most persuasive and persistent liar.

Earlier examinations. Ten months before admission, at the age of 15 years, 10 months, Opha tested 15 years, 1 month. With a basal year of 12 she failed the logical problems and the clock problems in 14, and the vocabulary, code, and 6 digits backwards in 16. She passed the digits forwards in 18. She was later examined by the court psychologist and psychiatrist and diagnosed as a case of hysteria. This diagnosis has been made at four different times by different workers.

Medical examination. Stokes'-Adams condition of extra-auricular beat 2 to 1 of ventricles. Respiration of right side of chest is twice that of left side. Fluoroscope showed extra systole. Throat positive for diphtheria. Purulent vaginal discharge. Quarantined. Treated. All laboratory tests negative except that a second examination showed she had gonorrhea.

Psychological examination. On the Stanford-Binet Opha scored 15 years, 3 months on admission. This time she fails on 5 digits backwards in the twelfth year. She gains on the logical problems in the fourteenth year, the code in the sixteenth year, and the design in the eighteenth year, but loses the differences of abstract terms and the enclosed boxes in the sixteenth year. In performance tests she is fair in comprehension, but not above a 12-year level in control, and at only 10-year level in imitative learning. On academic tests she scores high-school level in literacy, but barely sixth-grade performance for English and geography, whereas arithmetic is about fifth grade. Her association test value is 176. The reactions are delayed and cover complexes seemingly related to sex. Despite this, the test shows, on repetition, a constant and increasing tendency towards dissociation. She is deoriented for earlier experiences.

Opha was willing, demure, and pathetic in manner during the examination, but she was too willing to agree with the examiner, and varied her statements time and again in an attempt to meet approval. She was so evidently motivated by a group of complexes that an attempt was made at psychoanalysis. This succeeded for five interviews, and then she began to offer resistance,

showing marked antagonism towards the analyst. In three more interviews this antagonism grew to such a point she could not make a truthful statement, even about things she had discussed openly at earlier interviews. Work was continued but each barrier broken down revealed another forming itself. Her major complexes gave an infantile attitude towards the mother, which was ramified into a masochistic desire for petting and scolding from all women. With this was an expressed hatred of her father—and of all men—hence, of marriage. Besides this there was a philia for trees, developed to such an extent that she dreams of a tree lover. She clung closely to her feeling of physical inferiority because of her heart condition—it evidently justified her attitude of dependence upon the mother. If one were to stop here, the case seems far from complicated, but, as a matter of fact, her hysteria hides itself deeply below these apparent difficulties. She actually *wants to get married* but has been seemingly disinterested because of the fear of childbirth. An antagonism towards all people whom she has known more than a short time is quite marked. She feels neglected, abused, hurt, and very much depressed according to her statements, yet those very statements will be made with a very cheerful smile on her face. Her accusations are vague and without any basis in fact, for corroboration has been attempted. She has crying spells in which her face becomes greatly flushed and tears flow freely, yet in a moment or two she is laughing and happy. She undoubtedly has no definite relation between her actual bodily innervations and her statements of well-being or depression. Her antagonism towards the examiner increases in proportion to the refusal of opportunities (artificially created) to assume the maternal rôle. Even slight interest or rebuke or assumption of authority decreases her discomfort. She loves all those who do not force her to an adult assumption of reality.

Behavior under observation. Life with Opha is not monotonous. She tries many and varied ways to obtain the attention she desires. She makes clandestine arrangements to meet the next-door neighbor. She simulates lack of appetite and uses children of inferior mentality as dupes to obtain for her the food she desires. She blues beneath her eyes, on her lips, even on her finger-nails. She tells "accidently" of fainting spells when no one was near. She simulated a fever by a careful exposure of the thermometer to an electric heater beside her bed. Tore up her own credit record, thus losing a week's privileges, to be able to

blame an employee who did not cater to her. Accused people of spying on her, of having other children spy on her and on the one young boy whom she liked. When kept in bed because of her heart condition, she ran away and was gone all night, leaving a note in which she accused the physician of making an invalid of her and of not realizing that she was being deceived. She was no worse physically for the exercise.

Diagnosis. Level: normal. Function: psychopathic of the type which is usually diagnosed as hysteria. There are certain paranoid tendencies, however, and an alternate depression and exaltation which is almost an artefact, for it lacks the proper affective toning. These facts, considered in the light of her social history, practically confirm a tentative diagnosis of paranoid hysteria of syphilitic origin, such as is described by Kraepelin.

Recommendations. Continued observation was desired and she was sent to a state hospital, but her diphtheretic infection necessitated quarantine. As there was no state institution under whose care this could be given for an indefinite length of time, she was, of necessity, returned to the local court.

Prognosis. She will be one of those people who make the round of institutions and agencies throughout their whole life.

Subsequent history. She was discharged from the hospital wherein her throat was treated. After this she drifted over the state from one corner to another. She was on the stage. Finally she married a man as unstable as she, who was committed to a state hospital within a few months. Shortly after this the girl simulated an abortion. At intervals she works rather quietly. She has drifted back to visit several times and her lies are never less, nor less conclusively delivered.

Mentality Above 16 Years

The individuals who test 16, or over, number only 6. Three of these score a mental age of 16, and the others score over 17. The number is so small that the generalizations are impossible. There is no reason to believe that this group of 6 in any way represents all of the possible types that may or might be found in larger groups of cases, or if those studied were less definitely the more unusual problems confronting a court. No two of the group are at all

alike, and one can easily imagine numerous cases, which vary indefinitely from the attributes embodied in this group, without necessarily presenting many new factors. One of the 17-year-level group gives a plus Wassermann. She happens, also, to be the individual who shows least response to corrective attempts. Two of the others, although they give negative laboratory findings, have minor physical stigmata and reliable histories of parental infection. One of these belongs in the 17-year-level group, the other at the 16-year level. The latter has become psychopathic enough to be sent to a state hospital. All of the others in this group are psychopathic, but just what the outcome will be, it is hard to say. One case history will suffice as an illustration of the difficulty of the problem in general.

Benjamin S.

Benjamin is a tall, lithe, pleasant-faced boy. He is highly courteous, pleasant in conversational manner, responsive, seemingly trustworthy, and yet a little effeminate. When admitted, he was just 17.

Heredity. Little is known about the family. The mother is a nervous, high-strung woman who has had the care of the boy and who has been indulgent rather than sensible in raising him. The father was a heavy drinker who consorted with women of all types. The parents separated when he insisted upon living with another woman. The mother, herself, and her married daughter have bad reputations. There were four conceptions from this mating. The first was the daughter mentioned above. Benjamin was the next child. The third resulted in a miscarriage, and the fourth in a child who died when 2 days old.

Developmental data. Benjamin was born at 7 months. The mother attributes this to "red measles" from which she was suffering. He developed the same disease one week after birth. Growth seemed normal and uneventful until teething began, then he developed convulsions. They persisted at irregular intervals until he was about 3 years old. At 4 years he had typhoid fever and had to relearn walking. Nocturnal enuresis persisted until 14 years of age. He has always had headaches and flighty spells.

At times he gets depressed and will stay in the house for a week and speak scarcely a word. Other times he is very happy and sings.

School grade. Benjamin entered school at 7 years and finished the first eight grades. He never failed, but he did not like school work.

Economic history. He has worked in a railroad shop and before commitment was working in a shoestore, earning $3 a day.

Delinquency charges. His first court record was just four months ago. He went joy-riding with two boys who had stolen a motorcycle and with them stole an auto. They then drove out to a village where they tried to burglarize a store but were frightened away. Upon their return to C . . . . . they had an accident and the car was damaged, and several of the boys were injured. Since Benjamin had never been in court before, he was given a suspended sentence and put on parole. Three months later he violated this parole and stole the day's cash from the shoestore. He had watched where the man hid the money in an empty shoebox and then hid when the store was closed for the night. About $300 in cash and checks were taken.

Medical examination. A medical examination revealed the following facts. Benjamin was over-height and under-weight. He had carious teeth and needed tonsils and adenoids removed. These were attended to. He was round-shouldered and had flat feet. The deep reflexes were exaggerated, and his pupils reacted irregularly to light and accommodation. Vision was very poor. All laboratory tests of both blood and spinal fluid were negative. A fundus examination gave no indication of lues. The only suspicious symptoms, aside from the disturbances of reflexes, were notched lower incisors and the history of an abscess which had developed at the age of 12 days, suppurated for 8 months, sloughing off the seventh and sixth ribs, and leaving a marked depression and scar.

Psychological examination. On the Stanford-Binet he had a mental age of 17 years, 2 months. He had a basal age of 12, succeeded in all of the 14-year-level tests, thus securing a double, dependable basal, passed all of the tests in the 16-year level except the code and the vocabulary, and gained credit for the digits forwards and backwards at the 18-year level. He also did the ingenuity tests successfully. This was the first time he had ever been tested so that there was no possibility of a knowledge of the tests being partly to blame for the high score. On

the performance tests he did lower and more variable work. The Seguin board gave a score of 14 years, the imitation series rated him 16, and the Healy board placed him at an adult level. The Porteus series showed his disability, for he scored only 10 years.

Anthropometric measurements placed him in the most superior group of 17-year-old boys so far as height goes, but he rated only 70 per cent in sitting height, and 60 per cent in weight. His grips gave him 60 and 70 per cent respectively, and his lung capacity was 90 per cent.

Academic tests gave us little help. He passed all grade requirements in all subjects save that his arithmetic was slightly faulty and inaccurate when we came to eighth-grade requirements, and that his geography was too poor to rank him above third-grade performance. His literacy score placed him in ninth grade, both in accomplishment and accuracy. In general information he would undoubtedly rate as an average normal adult. His range of interests is circumscribed, and he knows little of even local community affairs. During the examination he covered these defects with a free and easy off-hand fashion of dismissing the subject from the conversation. Association tests gave definite indications of psychopathy. These decreased slightly during the 2 months he was at the Bureau. The characteristics remained the same. There was a certain perseverative type of response to the preceding stimulus word, as well as a constant alliteration with the stimulus word.

Behavior under observation. The boy was very helpful from the first day he was in the cottage. He was soon trusted in every way. He went on errands all over the city, never having any difficulty in carrying out the multiplicity of requests made upon him. He would stick to a piece of work until it was finished. He resented any discipline, however, and if he had to be spoken to for some small fault, would readily fall into a grouch which would last all day. He had an immense idea of his own importance. He assisted the teacher in school and within a few days he was giving advice as to how she should run things. He delighted in getting up extravaganza bits for entertainments, and seemed in the highest state of happiness when getting attention in this fashion. He realized his own weakness and that he had a suspended sentence to the Industrial School hanging over him. He had no false ideas about making good if he immediately went back into the environment from which he had come. Because of

this he asked the privilege of going honorably to the Industrial School.

Diagnosis. Superior normal level with psychopathic function.

Prognosis. Doubtful. The boy's insight into the situation is good. This is the most hopeful sign. What will happen when he gets out from under institutional care is unpredictable.

Subsequent history. Each day at the Industrial School brought increasingly good reports of this boy. Within a week he was trusted, and he was soon put in charge of a small group of other boys. He was placed on parole in the minimum time. Due to the shortage of work at that time he had some difficulty in getting a job. Finally his mother bought a small restaurant and ran it to keep him under her own supervision. This failed, and the outfit was seized for debts. A comment on her discretion in choosing a thing she could not handle! About this time Benjamin married. His wife was not such as one would expect a superior mentality to choose. She had been going with other men before their marriage, and even now it is a question whether the child that has been born is his or some other man's. The very week this baby was born another man stepped in and began, without remonstrance on Benjamin's part, paying her attention. Since then she has left him, and is living, openly and without divorce, with some one else. Benjamin regrets that she took the child but has done nothing to regain it, or to establish his right to it. He is working steadily, and that is all we can say for him. His tale shows everything but mentality. He has fallen down so far as society demands he uphold its convention, he has been indifferent to serious violations of the moral code, he had been negligent in a crisis demanding that he assume the obligations of a parent, he was unwise in his marriage in the first place. What has his 17 years and 2 months of mentality done for him?

CHAPTER XIX

GENERALIZATIONS

Glancing back over the detailed summaries of the cases presented, one might well ask, "What is it all about?" A mass of items, a group of delinquents, now testing normal, now testing definitely feeble-minded. They all seem more or less in need of institutional care. Here and there a single hopeful case is reported. There are a few facts that indicate the possibility of corrective education. It is impossible to classify the group thoroughly and exhaustingly under any one category. Sex? Boys and girls alike present the problems of anti-social conduct which we are studying. True, more boys than girls are represented in our group, but there are many reasons for that. Boys are usually allowed much more freedom than girls, and at an earlier age. They have more opportunities for such escapades, more chances of making wrong acquaintances, for finding wrong types of experiences. When we reach the age where sex offenses are common, the number of girls increases greatly and even exceeds the number of boys of the same mental level who are sent in for study. Age? Is this really a factor in delinquency? Within certain limits, and only within those. The child of 5 or 6 may, in extreme cases, be as great a behavior problem as his older sibling of 10 or 15. The chances are that we will not find a number of such delinquents which is anything like as great as the number of delinquents of more mature years, but age alone is not the controlling factor. Race? Most of the group we have studied are native-born Americans. They

have not the excuse that laws and customs are foreign to them.

"Ah, it is mental age which solves the difficulty," is the exclamation we meet from social workers and educators, but again the conclusion is wrong. Mental age has something to do with delinquency. Age has something to do with it. So have sex, environment, education, heredity, health, and physical handicap, as well as each and every experience of the individual. Each factor that has helped make him the individual he is, has, in some way, because of the depth or weakness of its impress upon him, helped to make for wrong or undesirable behavior. But no one of these is unequivocally the cause of all delinquency.

Behavior is a word of so many meanings we must definitely qualify or explain it when we would use it in any certain fashion. Earlier in this discussion we reviewed briefly what is meant by the behavior of an individual. From the technical or psychological standpoint, it means all that takes place, consciously, between the time that he receives an impression and the time that he reacts to it. In a certain way subconscious elements become a part of this "behavior." The resultant activity, verbal, motor, or functional, is actually a part of this reaction. To the lay reader it is usually the whole of the behavior. The two are inseparable. There can be no behavior or activity of the individual as a working organism, without antecedent and motivating nerve action or behavior. The trouble with our whole study of delinquency for many years was that we neglected the study of this inward nature of the problem confronting us. Then came the time when workers congratulated themselves upon their intelligence in having realized that the individual's intelligence, or his mental activity, had something to do with his behavior. The introduction of intelligence tests brought the realization that a fair number of those whom we call delinquent are actually

feeble-minded. But the problem was not actually simplified. There were, instead, a number of mysterious problems roused by the usage of mental age. The fact that some of the individuals who tested feeble-minded were sly, clever, cunning and that they carried out definite plans for their misdeeds was a drawback to the widely circulated idea that many or most individuals who were delinquent were actually feeble-minded. The result has been the declaration that delinquency is a character defect, and a whole constellation of studies following this theory.

Let us, however, approach the problem in the light of the children we have studied. To begin with, many of these cases, although only 6, 7 and 8 years old, give manifold indications of being true delinquents. What does this mean? Is character formed that early, is its deviation definitely determined at such a tender age? Let us look at these delinquent acts from the social standpoint. What are they? Merely the expression of decisions arrived at under certain environmental and physical conditions. They are the *end phrases* of lines of thought and decision. In some cases the behavior has been repeated so frequently that one may practically think of the delinquencies as habits of thought. Now what lies back of these *end phrases?* What motivates to behavior? There must be the amount of memory, comprehension, reasoning, and choosing which we associate with consciousness or awareness. In some instances a brief examination of the individual shows him so short of these elements necessary for any logical behavior, that we can readily judge him feeble-minded. We then see in his lack of equipment the reasons for his wrong behavior. But this is not true in any sufficient number of instances to allow us to settle down complacently and say "We have found the cause of delinquency." The feeble-minded individual who achieves delinquency does so because of the lack of balance existing between his ability and society's demands upon

him. The man with a 6-year-level mind, who is treated as a 6-year old, and put at 6-year-level tasks, does not become delinquent. The girl of 10-year-level ability, given 10-year-level incentives and tasks, is no problem. When the imbalance between the level necessary to meet social demands and the level of the individual's comprehension becomes noticeably great, something is going to happen, and does happen. Sometimes we call it a catastrophe, sometimes a crime; it depends entirely upon what happens.

But granted that the individual has sufficient mentality to enable him to meet the demands of the world around him, we may not feel sure that his endowment is sufficient. Normality as a member of the social group means more than ability to comprehend, learn, reason, and remember. It means more than a normal level of intelligence. It means ability to use the intelligence one has. Not only that, it means ability to use one's intelligence rightly. If one's ideas group themselves into orders similar to the groups in which they were expressed; if ideas of law and its demands prevail; if the recognition of family, group, and public approval has its rightful place in an individual's thoughts; if losses and bitternesses, the gain of others, and the continued existence of those hated are properly associated with their causes and consequences; if pleasure and happiness are rightly related to work and worth; then there is no delinquency, no social problem. But when a petty minor grievance finds itself a counterpart in importance with memories of the World War; when chance desires are recognized as masters to be obeyed and no more altruistic ideas inhibit them; when queer dazed beliefs in ability replace chagrin and knowledge of failure; when lack of home and parents causes daydreams of luxurious care, and realities become as dim as these dreams; then acts of the organism as a whole are apt to fall under the category of "delinquency."

Cause and effect as we know them in everyday life, that is, as experience has taught us to recognize them, and the agreement of word and deed lie outside the understanding of these individuals. Some accident or chance has made it impossible for their mental behavior to be similar enough to that of the rest of the social group for the rest of the group to "depend" upon it. In their consideration of such an individual as a member of the group they class him as unreliable, erratic, queer, and undependable. In other words, such delinquents have minds which do not function like the minds of the rest of the group. The difference of function is one which has deleterious effects for the rest of us. To some, such difficulties of action are explained when they have been designated as character defects. But just what do we, as scientists, gain from such added explanation? The act is a matter of willing. The thing willed is a matter of the final balance, one way or another, between ideas for and against the act. In the social group at large these ideas are so generalized that we recognize them as principles or rules of behavior. The difference with the delinquent, whose delinquency is a matter of erratic mental behavior, is that the principles on which he works are not predictable. They are not the accepted commandments of everyday behavior. Instead, he forms his behavior bit by bit from his general tendencies to behavior, which are either wrong in themselves or wrongly put together.

In any and all of us, will is now yea, now nay, as the ramifications of associations, ideas, physiological effects, and pleasure or pain are stronger on this or that side. Character is but the tenacity of associations between certain ways of behaving and the stimuli which may be related to this behavior, or to its opposite. In all probability, this tenacity of reaction is largely a matter of being able to disregard the pleasure-pain side of affairs. Here

we meet that much mooted question of when an individual does, or does not know, the difference between right and wrong. As a matter of fact, the probabilities are great that many minds, which comprehend these differences between right and wrong, and yet do wrong, cannot, in their own cases, see what certain acts *are* wrong. A mind with abnormal associations may see it right to shoot an individual. The justification may involve the highest type of abstract thinking. Yet the thoughts involved are abnormal. A man of superior intelligence may motivate his whole life to conceal a group of ideas which, futile in content, have become abnormally associated with extreme emotional disturbance, or with more general physiological disturbances. This man's functional level and his value to society are determined by the way his mind functions, not by his intelligence level.

If we eliminate the chance group of feeble-minded delinquents, the ten to thirty per cent of our offenders who pay the penalty for society's negligence concerning them, what have we left? A group of more or less responsible individuals whose chief difficulties lie in the way they use that ability which they have. The detailed analysis of groups on our various tests serves its purpose if it emphasizes this. We do not in practical life and practical work with delinquents meet the lecture-platform type of individual. The world is not made up of men and women, boys and girls, who are 1, 2, 3, 4, 6, 7, 8, or more years in mental level and who differ on this basis, forming nicely varying groups that can be handled as groups. The human organism is a variant. The average individual so often spoken of figuratively is never found. Moreover, the individual traits vary independently. A child tests 6 in one ability, 7 in another, 8 in other aspects, 14, perhaps, in others. The next child testing the same on the first test does entirely different things on other series. These facts mean a tremen-

dous number of formulæ of mental endowment. Besides this variation in level on different attributes, there enters in the greater variations brought by disease, physical handicaps, and experience. The factor of deviation in function is much greater, more widely significant, and more variable, than the factor of feeble-mindedness itself. It involves not only inferior minds but those of normal and superior levels. It brings a third dimension into the puzzle of intelligence studying.

In the delinquent we see the factor of deviation in one of its forms of practical significance. The instability of function naturally produces instability of action. The instability of action is but the end-term, the easily seen portion of a general reaction of the organism, that is, the individual, to the given situation. Not all unstable reactions are caught in the mesh of the court and the law. The divorce court bears its brunt to the full. The social agencies meet it in all of its misleading alliances with inferiority of intelligence. The manufacturer meets it in the mob inciter, the agitator, the capable type of employee who breaks and damages without seeming excuse of inability, and in the great number of accidents wherein it has been sudden action, and not sheer stupidity, which brought the trouble. The teacher finds in the unstable child, the verbalist, the nervous, excitable, mischief-making child. The general public finds the deviate a pest in his plausible begging and avoidance of work. The newspapers make their living from him. Deviation and instability lie back of suicides, freak escapades, masquerading men and women, slashers, odd offenders, queer murders, mobs, and the like. The further complication of the problem comes from the deviate's possibility of varying an indefinite amount. He may be insane, he may be just "a little queer."

Now that we know we have him, the problem is, or seems to be, what is to be done with him? The unstable individ-

ual, the psychopath, is not naturally a hopeless problem. There are many possibilities for his care and many potentialities for his future. Rightly to judge what these are we must know first of all what causes the psychopathy in the individual case. All psychopathies are not alike. The matter of causation is one of vital importance in determining even the temporary disposition of the individual. But what do we know about the causation? Not much. And yet, in some lines, we have made a beginning. The writer has been fortunate enough to have stumbled onto what seems to be a factor definitely related to a certain type of psychopathy. The relation of what that investigation has revealed seems a logical means of illustrating what is meant by the need for knowing the cause of the condition.

CHAPTER XX

CONGENITAL SYPHILIS

It is worth while to review the attitude with which the delinquents brought to the Bureau were studied. The findings herein reported are undoubtedly due to this attitude, and their presentation would be illogical and out of place unless this is kept in mind. Briefly, the situation was this: Earlier studies had proven (1) the invalidity of the intelligence quotient as a basis for differential diagnosis; (2) the need for observation of each individual from manifold viewpoints; and (3) that quality rather than quantity was the puzzling factor in studying problem children. The test series established as a basis for this research was consequently worked out with the desire to overcome these criticisms. The tests used were manifold, the most practical for application and interpretation of those then available. The attitude assumed was: gather all information possible on each child, whether it seems irrelevant and unnecessary or not; deal with him according to the best of the laboratory's ability; and, gradually, new truths cannot help but show themselves. Practical work, scientifically done, aiming at a solution of actual social problems, must, sooner or later, bring its gist of generalized truths.

Some four or five months after the beginning of this program the use of the two-fold diagnosis spontaneously developed. It was easier than what we had been using, which was a statement of mental level (involving consequent diagnostic classification), with the addition of a paragraph of corrective and suggestive findings made from

an analytic examination of the quality of all the data gathered on a child. From these analyses gradually evolved, for tentative and working usage, a list of points of qualitative deviation. These were neither permanent nor of equal significance, but they codified the method of qualitatively analyzing where a youngster stood and made it possible for the Staff to use the assistance of imperfectly trained and inexperienced examiners while they were being trained. The evaluation of these points we finally began to call the estimation of the child's "psychopathy," or his "functional deviation." The study of psychopathy soon became the keynote to all of the clinic work, one and all naturally falling into the attitude that mental-age determination was a preliminary and necessary part of the study of a child, but that it was merely preliminary. Some eight months after the Bureau work had been put upon this basis, and so about four months after a first organization of a method for evaluating psychopathy, the writer had a most unusual experience while examining a girl, not a committed case, but one who had been sent in just for a clinic examination. No history had been reported, although, since the girl had been sent in by the interdepartmental social-hygiene worker, the probabilities were that she was a behavior problem of some sort. After the Stanford had been given and a certain minimal number of other tests completed, the examiner found herself developing a definite attitude of diagnostic certainty concerning the girl. This was unusual. It was contrary to the attitude of impartial observation always striven for—it was not a thing definitely the result of ascertaining the girl's mental level and her performance rating. The diagnostic phrase, "congenital syphilitic," would creep into consciousness, in spite of every effort to avoid it. Careful inspection revealed in the girl none of the marked stigmata then known to the examiner. Nor was the girl like any special case or group of cases, known to

be of specific origin, with which the examiner had previously worked. Instead, the diagnostic phrase traced back to the quality of the tests done, the girl's superficial attitude, the relation of successes and failures. This experiential phase of the diagnosis was sufficiently vivid to lead to the insertion, in the letter to the agency, of a phrase saying that the girl seemed to be like the congenital syphilitics in her reactions. No medical examination was made as the agency took care of those matters itself. Three days later a telephone call from them reported that the blood Wasserman was 4 plus. The infection was of the congenital type.

Needless to say, this incident opened a vast field of speculations. The girl had been somewhat inferior, testing 11 years, 11 months on the Stanford, although her academic ability was of high-school level. Other tests corroborated this lack of balance in development and function. The question of chief interest was, naturally, whether or not there was present, in the tests in use, a sufficient basis for the differentiation of individuals suffering from different types of neural handicaps. The concrete question evoked was whether congenital syphilitics, some congenital syphilitics at least, are different from other children in the quality of their performances, or in the grouping of their abilities and disabilities. The probability of ascertaining the presence of such an infection from a psychological study of the individual seemed wildly speculative. Yet, if this were so, would it not be consequently logical to assume that other etiologically different groups might show other, equally distinct, groups of symptoms? Might this not mean a probable tendency to special types of delinquencies, according to the factor which had caused the individual's unstable condition? Might it not mean that prognosis could be much more definite, being related to the etiological classification of the individual's psychopathy? Would this ac-

count for the difference between one or two indications of psychopathy in one individual, and the same number of differently arranged symptoms in another? Could cases be more understandingly held custodially or paroled with a higher chance of success if this additional factor was taken into consideration? These are a few of the concrete questions that immediately confronted the clinic. They were valuable scientifically, yet far more valuable practically.

A first task was naturally the review of the individuals having congenital syphilis who had been examined up to that time, with the especial purpose of finding out whether or not there was any basis, in the peculiarity of their tests, for this chance impressionistic diagnosis. Of course, the number of cases handled had been small, and even then a number had to be eliminated because of the dubious quality of the history, incomplete physicals, physicals done by other agencies which had not included Wassermanns, etc. But inspection showed several favorable indications. The tendency was for congenital syphilitics of similar mental ages to fail and succeed on practically the same tests. Not only that, but the subjective impressions and the behavior observation records on this group were similar, although not so full as reëxamination of the data showed to be necessary. The one thing that stood out clearly on tests of all levels was the distinct motor inability of the congenital syphilitic. He was usually several years inferior in this respect to his successes and failures on other tests and performances. This same condition showed in the writing of most of these cases, being the most marked symptom in some instances. There was an angularity of line, a tremor throughout the copy, a vague overlapping and adding of fringes of unnecessary detail. Another attribute that was indicated is less easy to define. There was a superficial verbalism in most of the cases. This was not a thing that showed on

actual vocabulary ability or tests where verbal ability plus something else meant success. The verbalism was rather a matter of profuse talking without an appropriate percentage of ideas in the conversation. Stimulations arouse mental activity, but in the congenital syphilitic this activity is an immediate verbal response, without reflection, or working over, or criticism of the topics discussed. It is, in a mild, shadowy fashion, similar to the genial verbosity of the paretic himself, yet it has in it more of the fatigue hyper-excitability of a manic-depressive of excited phase. With this there goes a comfortable overevaluation of the individual himself. He is, can do, and will do well, all that man could wish . . . in his own estimation.

With these two groups of attributes as a key, the work of the Bureau continued its attempt at analysis and classification of the symptoms of deviation of function, that is, psychopathy, presented by the delinquents sent in for study. The work was greatly facilitated by the hundreds of cases that were annually sent in for mere clinic examination. Although such cases had to be handled too casually to give data of high scientific value, yet the work with them gave a chance for much wider practice in the application of the principles of clinical interpretation, which seemed to glimmer out from the vast and unlighted provinces of juvenile psychopathies. Naturally, since it was the first clue to the possibility of such methods, the work on congenital syphilis received constant attention and was made the basis for a specialization of research. There seemed to be a definite possibility that it, rather than fainter clues, might quickly bring the answer, to some of the problems so vividly and acutely haunting each day of clinic work. So far, the work done is not final, but it has been more than worth while in the returns which even a couple of years of investigation have brought. Indeed, it is so promising that it seems worth while to summarize in a rather comprehensive fash-

ion a number of the aspects of the problem of the congenital syphilitic as the following of a psychological clue revealed them.

To begin with, the frequency of congenital syphilis is a thing of much uncertainty. Various clinics report such different situations that no one could in *a priori* fashion, suppose or hypothecate it as a serious factor in the social problems presented by juveniles. The condition literally hits one in the face. No one working with children in a fashion which ascertains the presence of the disease needs to develop any exaggerated idea of its frequency. The condition is there, it appears stalking as a pale ghost in front of, beside, or behind many other conditions of dependency and delinquency. Practical workers dealing with those problems related to it have too much to do, and are too well accustomed to it, to see its significance for others. Those outside the field of such practical work do not see it all. Again, the relation of delinquency to feeble-mindedness has somehow led to the inference that the relation between delinquency and syphilis is similar to that said to exist between syphilis and feeble-mindedness. There the general opinion seems to be that the relationship is one of chance. Fernald, of the Massachusetts School for the Feeble-minded, reports 6 per cent of the inmates of his institution as suffering from this condition, according to a Wassermann census of the institution. This would make syphilis no more frequent among feeble-minded individuals than it is among the general public. It is impossible to cite the various authorities as to such frequency. A typical modern report is that of a children's clinic in Norfolk which takes routine Wassermanns on all cases coming to it for any sort of treatment.[1] For white children they report an in-

[1] Lawrence P. Royster, "Routine Wassermann for Children," *Virginia Medical Monthly*, April, 1921. Abstract in *Social Hygiene*, June, 1921.

cidence of 7.04 per cent while for colored children it is 15.47 per cent, giving a general average of 12.5 per cent for their first 1,000 cases. Tredgold counts it merely among the minor causes of incidental feeble-mindedness, claiming, "There are also other diseases, such as rickets and syphilis, which rarely produce mental deficiency."

If we search for definite statements of the relation of congenital syphilis to delinquency we find even less written. Southard and Solomon in their most extensive study of neurosyphilis confine themselves to the statement that "We should not dogmatically say that there is a relation between early delinquency and syphilis. Still, it is not unusual to find emotional disorder and instability, as well as delinquency, in congenital syphilitics."[2] They urge the differentiation of and recognition of the congenital group of neurosyphilitics. While the distinction is "on theoretical grounds, hardly defensible. On practical grounds, however, the juvenile neurosyphilitics do form a group having special relations to feeble-mindedness, epilepsy and the like."[3]

One may interpret the relationship between syphilis and delinquency in a number of modern studies, but such an assumption of facts beyond the statements actually made is hazardous at least. One also meets, in such studies, the difficulty of determining whether the workers have taken into account the relationship of primary infection to congenital infection and have ruled out all but those cases where the inheritance seems clear. Taken all in all, there is little known about the general social aspects of congenital syphilis, its frequency, significance, and treatment. Even the matter of determining the frequency of syphilis in the group of cases herein reported was and is not an

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[2] E. E. Southard and H. C. Solomon, *Neurosyphilis: Modern Systematic Diagnosis and Treatment*, p. 299.

[3] *Ibid.*, p. 438.

easy matter. The taking of a single blood Wassermann is by no means sufficient. The Bureau is located in a city where there are, fortunately, two public laboratories, yet even specimens sent to both of these do not by any means solve the problem of infection, for now one and now the other reports positive findings, when the alternative report is negative. One meets at once a number of related problems; the accuracy and reliability of the Wassermann tests, the need for corroborative data, the determination of the significance of stigmata, the relativity of family and developmental history. In general, Southard's rule has been used in interpreting the Wassermann reports in this study. "Positive indicates syphilis, except very rarely in acute febrile conditions such as malaria and pneumonia. Negative does not exclude syphilis. In obscure conditions a series of less than three negatives has little diagnostic significance. Doubtful suggests syphilis."[4] In attempting to interpret the practical data on the case a conservative medium has been striven for. With due regard for the possibilities, Hericourt's claims for syphilis as the basis for rachitis, tubercular predispositions, backwardness, feeblemindedness, idiocy, epilepsy, hysteria, and dementia præcox have been taken conservatively.[5] When in doubt as to interpretation, the general practice has been to weigh the data on the side of the absence of infection. In cases, however, where the stigmata meet the conditions of approval from such men as Hutchinson and the Fourniers, the case has been accepted, at least tentatively, as syphilitic. Generally, the acceptance of such indications has meant a reënforced prosecution of investigations of family history, developmental history, and earlier medication, in the hope of validating the assumption. Needless to say, one does

[4] *Ibid.*, p. 479.

[5] J. Hericourt, *Les Maladies des Sociétés: Tuberculose, Syphilis, Alcoolisme, et Sterilité.*

not wish to, and even cannot, carry out such investigations persistently in the face of family denial, unless the individual has given sufficient reliable evidence of the condition to eliminate the danger of "insulting" or worrying an innocent family.

It may be that some will raise the objection to any assumption of a relation existing between syphilis and delinquency, if the assumption is based upon the mutual coincidence of syphilis and delinquency in a certain number of cases. Such an objection is undoubtedly justified unless we can show that there is more than a chance relationship. The first indication of such an actual correlation is indicated by the frequency of congenital syphilis in our group of delinquents. The total number of children studied was 369. Of this number 73, or 19.8 per cent, give positive Wassermanns. This was by no means the first Wassermann in all cases. In some of the individuals as many as 5 or 6 were taken before positive findings were reported, yet these were cases where the other physical indications almost undoubtedly pointed to the presence of syphilis. Besides these 73, there were 26 children definitely diagnosed as congenital syphilitics by a combination of psychological, medical, and history findings. Six of these were younger children in families where the older siblings were known syphilitics. Fifteen of the others showed definite stigmata which were incontrovertible. Only cases with Hutchinson teeth or other bone malformations such as sabre tibiae, or fundus indications which yielded to treatment, and marked retardation of growth were considered. Six of the cases gave definite familial history. In one instance the case was traced back through a father who had only physical stigmata to an infection from the grandfather. In another case a negative Wassermann was definitely explained by obtaining a history of an early four plus with years of treatment. In 12 of the 26 cases the psychological diag-

nosis of syphilis preceded medical findings. Of course, there could be no such precedence where marked stigmata hinted at the diagnosis when the child was first seen. In all, 99 of the 369 children were definitely diagnosed as congenital syphilitics. This is 26.9 per cent of the whole group. One of these 99 is not only a congenital syphilitic but has also acquired syphilis anew, or gained renewed activity of symptoms.

The accompanying table shows the relation of the congenital syphilitics to the not-known-to-be-syphilitics at the

FREQUENCY OF CONGENITAL SYPHILIS

Mental Age	Number of Cases	Positive Wassermann	Total Number Syphilitics	Total Percentage Syphilitic
1.....	1	0	0	0
1.....	2	0	0	0
2.....	2	0	1	50
3.....	3	0	1	33
4.....	4	1	1	25
5.....	4	1	2	50
6.....	18	4	5	28
7.....	42	7	12	29
8.....	43	11	13	30
9.....	61	17	20	33
10.....	61	14	18	30
11.....	50	7	10	20
12.....	24	2	4	17
13.....	23	5	5	22
14.....	12	2	2	17
15.....	13	1	2	15
16.....	3	0	1	33
17.....	3	1	2	67
Totals....	369	73	99	26.9

various mental levels. Although the phrase is awkward, it is only fair to speak of the comparison in this fashion. In this small group of 369, besides the 99 known cases of congenital syphilis there are, *with the most conservative of es-*

timates, 54 others who have rather definite symptoms of congenital infection, yet they are not marked enough and their history is not definite enough, and observation has not been long enough, to make for scientific certainty. Consequently, in this study they are simply indicated as a doubtful group, but in general they are counted in with the not-thought-to-be-syphilitic group. This has but one effect. It makes the group of syphilitics definite, an assured fact, a minimum number of those affected, *not* the estimated maximum number of possibly infected individuals. As a result, all that we say about them is conservative in the extreme, and may be taken as more than actually determined.

There is in this high percentage of congenital syphilitics a seeming relationship between syphilis and delinquency. But we can go even farther than this. The work of the Bureau has given us data on another selected group of children who may be classed as dependents. Two hundred and sixteen of these have been examined in routine fashion during the time the 369 committed cases were studied. Technically, this group of dependents is a selected group. They come from local agencies where they have been taken care of because of some breaking down of the family ability to provide for them. This is a thing that seldom happens in our stable middle class. If something happens to such a family, the individuals who stand nearest in relationship try to care for the children. When families sink to such a level that they leave their children for the state to support, desert them, or are separated from them because of poor care, we undoubtedly have inferior family stock from which to start. But, otherwise, the group are no more selected than our delinquent group. They have a distribution which is similar in age, sex, color, and racial distributions. They are not even selected for behavior but come in as they need care—good, bad, and indifferent. The medical work for the group is done by the agency's own

physician so that we have in this change of personality another check on the reliability of the work done by the Bureau on delinquents. The laboratory work is done at the same laboratories. Of this dependent group of 216, 28 or 12.9 per cent are congenital syphilitics and give positive Wassermanns. Besides this, there are 20 young children who are the younger siblings of the known syphilitics, who do not as yet give positive laboratory indications of the disease, although most of them are stigmatized. Together, these total 48, or 22.2 per cent of the dependent group who are syphilitic. Out of this group of 216, there are 51 who are reported as delinquent in some way. Of this 51, 32 are non-syphilitic and represent 19 per cent of the non-syphilitic group. The other 19 are syphilitic and represent 39.6 per cent of the syphilitic group. Delinquency is twice as common among the syphilitic children of this group as among the non-syphilitics.

But the matter is not even as simple as this seems to be. Let us analyze the group a little more according to their actual age. There are 41 children under 7 years of age, 10 of them being syphilitic. In this whole group there is only one delinquent, and this proves to be merely a case of very high temper which makes the child unmanageable in a foster home. There are 41 other children between the ages of 7 and 10. Of this group, 14 are syphilitic. Six of the syphilitics and 4 of the other children in this age group are delinquent. This means 42 per cent of the syphilitics are already giving trouble before the age of 10, although less than 8 per cent of the other children are troublesome. Above the age of 10 there is a total of 134 children. Twenty-four of these are syphilitics and 110 are not. Twenty-six of the non-syphilitics are showing delinquency, whereas 13 of the syphilitics are troublesome to the same degree. This is a matter of 24 per cent of delinquent non-syphilitics as contrasted with 54 per cent of syphilitics who

are delinquent. This leaves 9 syphilitics above the age of 10 who are not showing delinquency tendencies. An analysis of these cases reveals the fact that they fall under one of three categories. They are either very low in mentality, or suffering from some major physical handicap which keeps them under constant surveillance, or they have spent the whole of their lives under the régime and regularity of institution homes. This same classification by no means applies to the non-syphilitic group.

In general, this brief analysis of the dependent group indicates a high probability that syphilis is not present without at least helping in the development of traits which make for delinquency. The final scientific test of the presence or absence of any effect from congenital syphilis which differentiates this type of a child from others is an analysis, step by step, of his mental make-up, and a comparison of his abilities with those of the not-known-to-be-syphilitic individual.

The task of such an analysis for differential features is almost impossible. The prerequisites remind one of the old recipe for robin-pie: "first, catch a sufficient number of robins to serve ye guests." One knows something definite and delimiting when one has laboratory, medical, and family findings that determine with finality that the individual is affected with syphilis. The case is not so simple when the individual is non-syphilitic. In the group wherein we get negative Wassermanns and no definite history of syphilitic infection, no definite stigmata, there are sure to be congenital syphilitics of second, third, and even fourth and fifth generations, bearing anomalous signs of their condition. They are anomalous because we know so little of what they mean. We do not even know what signs we may expect in the healthy children of healthy parents. We have the incidence of certain symptoms, but such exact data are few. How can one clinic decide the significance of a

multitudinous group of symptoms, when individuals spend their lives trying to determine whether some one thing, such as rachitis, is of syphilitic predisposition or not? How can one determine the normality or latent infection of the individuals who are physiologically retarded in development, who suffer from glandular anomalies, have extreme eye defects, show again and again scaphoid scapulæ, scoliosis and kyphosis, deafness, marked eye defects, extreme disturbances of the reflex system, speech hesitancies, voice signs of all sorts, modified mongolism, and scores of minor stigmata of eye, ear, skin, and hair? The best that we can do is use a system of encroachage. Briefly, such a method is this. The group which is definitely syphilitic is compared with the group which is not known to be syphilitic, including in it the doubtful cases. The syphilitic group encroaches on the other group simply because there are syphilitics in that unsorted mingling. Because of this, differences between the two groups are undoubtedly less than they would otherwise be, but they are also undoubtedly more definitely true as differences. A further refinement is possible. The doubtful cases may be excluded, and the two extreme groups compared. Even then, there is no doubt but that some syphilitics will remain in the general group. The doubtful cases can then be compared with the other two groups, and the probability of their proper relationship be determined by the manner in which they resemble one group more than the other. However, for any such a refinement of method the number of cases at any one chronological age or mental-age level must be far greater than in any of the groups available for this study. Even for the general type of comparison which is suggested for use here, the work done on the cases at hand has been almost too meager. Could one do as Hall would suggest and follow 20 cases a lifetime, the information gathered would undoubtedly pay far more than that on

twenty times twenty. In this case, however, there was no choice. The study had to be made within the time and under the working conditions offered by the state institutions.

To present such a matter in detail is entirely without the province of this discussion, which is merely a first study or exposition of the possibilities of the matter. It will suffice, for purposes of illustration, to analyze in detail one of the mental-age groups. In most situations we have overemphasized the value of the statistical side of clinical psychology. The true inwardness of diagnosis lies in an ability to grasp the principle of right or wrong action which typifies a certain sort of abberant individual, and to recognize this principle, in the irregularity of its functioning, wherever it appears. Fernberger has recently demonstrated in practical form the error of assuming a definite validity for differences such as can be pointed out statistically in the study of intelligence attributes.[6] The error of interpretation comes from the great degree of variability within the various groups. The averages can mean but little. It is the fact that we have such high degrees of variability that promises well for clinical advance. One may and should keep in mind the general trends of groups, but must always consider that the individual studied at that moment may be the most extreme of the variants in his group, rather than an average member of a group to which he statistically belongs. With this in mind, let us try to see where, in general, the syphilitics of a given mental age differ from the not-known-to-be-syphilitics.

The 9- and 10-year mental levels represented the two largest groups, 61 testing at each level. The 10-year level has one disadvantage more than the 9-year level in this

[6] Samuel W. Fernberger, "Statistical and Non-Statistical Interpretation of Test Results," *Psychological Clinic*, 1922, Vol. 14, Nos. 3-4.

study; there are in the group more cases which were questioned as being congenital syphilitic and which could not be proven. This might well mean that the differences between the known group and the not-known group would be considerably less clear than in the 9-year group, which naturally presents itself as more favorable for study.

Following the same type of analysis as that used in reporting our groups, in general there are a number of definite differences between syphilitics and non-syphilitics evident upon even a first inspection. The syphilitics number 20, the non-syphilitics number 41. The syphilitics have a lessened age range, which may be due to the smaller number of cases. They vary in age from 9 to 16 instead of from 8 to 18. The median age for both groups is the same. The mode for non-syphilitics is 12, for the others a triple mode of 13, 14, and 15. The average age of the syphilitics is 13 years, 3 months as contrasted with 13 years, 10 months for the rest of the group. The number of colored children is only 5 in the total group, and 2 of these are in the syphilitic group. So far as such small numbers go this is about a due proportion. I.Q.'s range the same for both groups. Offenses seem to yield but few differences, yet these are significant. Forty per cent of the syphilitics are sex offenders, and only 24 per cent of the non-syphilitics have the same charge. Moreover, the more serious charges are without exception against the syphilitic cases, and include rape, and extreme homosexual practices. The other marked difference is in the charges of extreme and general incorrigibility. Here, for the number of cases, there are half again as many charges against the syphilitics as against the non-syphilitics. All of the charges of queerness, seeming to grow worse, deterioration questioned, and suspicions of mental fitness happen to be placed against the syphilitic group. The number of charges for each individual seem less for syphilitics, but they are quali-

tatively more serious. Besides this, there are recorded, in the detail histories of the syphilitics, more numerous minor irritating behavior incidents which make their general behavior problem far worse. There is no great difference in school grades accomplished, save that the range of accomplishment is less in the syphilitics, being 3 to 7 grades, whereas the others range from 2 to 8 grades. The average syphilitic grade accomplishment is slightly higher (4.8 as compared with 4.6 grades), but the mean variation is also greater.

The range of possible basal years on the Stanford is identical for the two groups. The modal and median basals are also the same. The range of successes through years above basal is less in the syphilitics, so far as the modal range and the median range go but the *actual variability* of the group is a range of from 2 to 12 years as contrasted with 1 to 8 years in the not-known-to-be-syphilitic group. The average range for syphilitics is 4.4 years above basal, for others 4.3 years, with means variations of 1.5 and 1.3 years respectively. In other words, the syphilitic usually has a lesser range than other psychopaths, but the variability of his group is much greater.

When we come to a qualitative analysis of the Stanford we find that the distribution of successes and failures is quite different in the two groups. Only syphilitics fail in the 7-year-level description of pictures and repeating the days of the week. The quality of the diamond drawing is peculiar in 53 per cent of the syphilitic trials, but in only 26 per cent of the non-syphilitics. At the 8-year level the difference is most marked on the ball and field. Thirty-seven per cent of the 9-year-level syphilitics fail this test as contrasted with only 18 per cent of the rest of the children. At the 9-year level the discrepancy between the two groups is more marked. The percentage of failures in the two groups are:

PERCENTAGE OF FAILURES IN THE STANFORD AT THE 9-YEAR LEVEL

Test	Syphilitics	Not-Known-to-Be Syphilitic
Date	10	24
Weights	45	21
Change making	0	20
Reversing digits	47	38
Making sentences	0	13
Rhymes	20	44
Months	13	32
Stamps	0	9

Verbally analyzed, the syphilitics are more than twice as apt to fail on the lifted weights and are a little poorer on reversing digits but aside from this are more apt to score successes at the 9-year level on all other tests, being definitely better in the rhymes, the date, and making change. Above this level the significant differences in percentage of failures are as follows:

PERCENTAGE OF FAILURES IN THE STANFORD ABOVE THE 9-YEAR LEVEL

Test	Syphilitics	Not-Known-to-Be Syphilitic
10-year absurdities	63	34
Quality on design	70	25
Reading test	26	59
Ball and field at 12	89	65

Above the 12-year level the syphilitics succeed on only 3 tests, the logical problems, the fables, and the cut design. There are only a few successes on each of these tests, but they are all failed on by all of the non-syphilitics although they, by contrast, succeed occasionally on other tests through the 14-year level, and never above that level.

In general, the syphilitics are better on the tests involv-

ing imaginal functioning, superficial verbal ability, and academic training but poorer on all tests involving motor control and kinæsthetic appreciation. Poor quality on the diamond and design, plus difficulty on the plan of the ball and field, plus failure on the weights, plus difficulty with the absurdities, yet with the possible variation of one of these groups of failures, occur in 60 per cent of our group of syphilitics but not in the others. In the same way, success on the date, the change-making and rhymes, associated with failure on the absurdities, and good reading quality is a combination met only 3 times in our group of 41 non-syphilitics, yet 8 times in our group of 20 syphilitics. When these groups of failures are criticized in the light of other quality differences of the two groups, we find none of the non-syphilitic group which meets the formula of successes and failures so common among the syphilitics. Let it be understood, however, there is every possibility that the addition of even one case might give us the case who would amalgamate, or at least connect, the peculiarities of the two groups. But the Stanford analysis, bear it in mind, is but one of a group of criteria in which the syphilitics tend to differ from the non-syphilitics.

The association tests show no marked difference between syphilitic psychopaths and psychopathic delinquents in general, so far as distribution goes. There is a tendency to the use of phrases in only 53 per cent of the syphilitic group as contrasted with 77 per cent of the others. The average number of phrases is the same but the mean variation is greater in the syphilitics (10.4 as compared with 8.8). In the words of individual value, the frequency varies from 5 to 100 for syphilitics as contrasted with a variation of from 4 to 71 among the non-syphilitic group. The average number of individual reactions is 25 with a mean variation of 18, whereas the non-syphilitics average only 20, with a mean variation of only 11. A qualitative

analysis of the association test reveals much more of a tendency to superficial neologisms and to complex indicators, revealing the importance of the ego in the syphilitics. Repeated tests on the association series show less tendency to variability in the syphilitics than in the other children. That is, they are more stable in their variability, once it is determined.

The performance tests show still further differences. The formboard gives the syphilitics an average mental age of 10.4 years with a mean variation of 1.1 year, whereas the non-syphilitics score an average of 10.8, with a mean variation of 1.3 year. The imitation series gives the syphilitics a mode and median of 10 years, whereas the non-syphilitics score at 14 in both respects. The syphilitics average 10.8 years, with a mean variation of 2.2 years. The non-syphilitics score an average of 12.5 years, with a mean variation of 2.9 years. The scores on the adaptation series are identical. On the Porteus, the syphilitics range from a score of 6 to one of 13.5 years, the other group ranges from 5 to 13.5 years. The syphilitic mode and median are 8, the others have a mode of 9 and a median of 9.5 years. The averages are 9 years, 7 months for the syphilitics, with a mean variation of 1 year, 5 months, for the others an average of 9 years, 11 months with a mean variation of 1 year, 6 months. On the Healy completion test, the ranges, modes, and medians are identical, but the average for the syphilitics is 8.1 years, with a mean variation of 1.6 years, whereas for the other group it is 8.6 years, with a mean variation of 2.1 years.

There is also some difference in the school tendencies of the two groups. On literacy, the comparison is rather significant. The syphilitics range from 12 to 26 in score, the others from 5 to 29. The median for the two groups is identical. The mean is 19.5 for the syphilitics as contrasted with 19.0, the respective variations being 3.7 and

4.2. On this test the inaccuracy of the syphilitics ranges from 5 to 37 with an average of 13 per cent and a mean variation of 6.8 per cent, whereas the rest range from 0 to 30 with a mean of 11.6 per cent and a variation of 6.7 per cent. In arithmetic, the syphilitics have a mode of third-grade performance, as compared with a second-grade performance as modal for the rest. The distributions are similar. Both groups have a mode of third-grade work in language, but no syphilitics score below this level. The syphilitics average over half a grade higher in this work. In geography, a similar difference in performance appears, but the syphilitics are a grade in advance of the others. In spelling the syphilitics average barely fourth-grade work, whereas the others average four-and-a-half grades of work. Yet the range of accomplishment for the non-syphilitics extends both lower than the syphilitics and higher.

In general information, the syphilitics have a certain superficial conversational ability which enables them to make a much better impression, although much difference can not actually be demonstrated on the tests.

The stories of the syphilitics are more vague, deoriented, misty, more woven around with fancy. In many instances the individual seems to lie definitely and persistently and to have definite lapses of memory concerning episodes of bad behavior. The continued observation of a number of such cases justifies the belief that they are not actually lying in many instances. Instead, there is a slight but persistent tendency to amnesia, with at least a tendency towards delusions. From this combination come the difficult situations which the cases make for us. They do troublesome things, remember part of them, and act in accord with what others do to them, which usually seems to be punishment or discipline entirely out of proportion to what they feel they have done. The non-syphilitics do not present these characteristics.

While under observation this syphilitic group yields more of drama, excitement, and more frequent demands for disciplinary or corrective handling than the non-syphilitic group. They are the talebearers, the sneak fighters, the temper-tantrum cases. They have every proclivity to, and desire for, homo- and heterosexual experiences. They are so plausible, so polite, so superficially acquiescent, that the ward attendants are unsuspicious and shower them with privileges, until some serious episode reveals the real nature of the individual.

Medically, the group can hardly be separated from the non-syphilitics. They have, of course, some of the typical aftermath of the syphilitic infection, but few of the cases show progressive sensorial deterioration or active lesions of any type, not one, in fact, of this 9-year-level group.

Anthropometrically, the group is not to be separated from the non-syphilitic. The measurements of this group, at least, do not confirm the general opinion that congenital syphilitics are undersized. Nine of the 20 have a standing height in the highest decile.

Their heredity is about as mixed as that of the rest of the group. Syphilis may enter as an additional, complicating factor in almost any type of a family. The normal, the feeble-minded, the insane, the epileptic, the alcoholic, and the criminal are represented in both groups.

The diagnosis of a congenital syphilitic is a rather complex thing in its consequences. We not only know his level and his functional disturbance, but we know the presence of a complicating factor which may speak definitely against his future development, or may turn his behavior towards the psychotic end of the scale. The syphilitics are feeble-minded in some cases, and psychopathic as well. They are merely inferior and psychopathic in other instances, normal but psychopathic in other cases, and one of this group is definitely psychotic. There is one condi-

tion present in two of the syphilitics not present in any others of this group, although we have found similar conditions in non-syphilitics at other levels. This condition, for want of a better name, we have called a deteriorative form of psychopathy. The individuals show a certain group of lacunæ or mental vacancies where one feels absolutely sure, from what they do on other tests and from their histories, as well as from the presence of vestiges of earlier ability in language, that they are now functioning far below where they had formerly lived mentally. In some such cases, even observation for a few months is sufficient to give comparative results indicating the lowering of ability.

So far, what have the comparisons indicated? With the same mental level, this fairly good-sized group of syphilitics and those not known to be syphilitic give definite but minor indications of differences, which are similar in trend in different test series. The syphilitic seems to be more variable than the non-syphilitic. He is found at both ends of most distributions on test values, except where academic acquisition enters in, and there his lower extreme tends to be higher than that of other groups. This does not mean that he is a less variable creature, but that he is an individual who has had ability to learn more, or at least retain more, than the others of the same mental level. The probability seems to be that it is his extreme variability which pulls him down to the 9-year mental level. As a group, the indications are he has more mentality than others of the level. He is poor in motor control and all that it involves, be it Seguin formboard, drawing a diamond, lifting and comparing weights. His memory seems to be rather poor for the type of demand made in the imitation test, his spelling shows a similar defect, and his behavior tendencies definitely confirm this, when one studies him critically. He is verbal in inclination, fairly well informed, less variable in his information and the general type of associa-

tion of ideas than the rest at his level, *but* his variability or instability tends to be more constant. He is naturally low on performance tests. His tendency seems to be to get into court a little younger than others of his level, and his offenses are of a chronic nature rather than those which suddenly loom into being. He may come from any type of a family. The future of the group is rendered additionally doubtful because of the disease handicap.

A similar analysis of all varying mental-age groups is imperative for actual clinical handling but is out of place here. It must suffice to say that, so far as the number of cases at the various levels justifies even tentative conclusions, the differences at other levels are at least as marked as at this level. *There is no doubt but that one with a knowledge of the congenital syphilitic as a mental problem can recognize such cases through their behavior on standardized tests in the time usually given to such cases in a psychological laboratory of good standing.* Many other items of information concerning the congenital syphilitic have been found in the case studies reported in earlier chapters. In but a few of these instances are there enough cases to make any deduction of a general principle. But, until more extensive data are available, even the actual *occurrences* are of sufficient importance to be reported briefly, with simple illustrations. Naturally, one cannot estimate the *prevalence* of such occurrences.

1. Congenital syphilitics are not necessarily delinquent. Of course, those reported in this study of delinquents are there because of behavior difficulty. The congenital syphilitic, carefully raised, carefully disciplined, carefully educated has a good chance for a non-delinquent career, as good as any other psychopath has under the same conditions, so far as we know. Many of such cases come for examination because of their very queerness, or instability. Others seem to pass through to adult life with little diffi-

culty. One may well raise the question as to the type of infection in such cases. Has it affected the musculature, some restricted neural tract, some definite part of the skeleton, the glands, some other internal organ? We must remember that psychopathy means an affected neural system.

2. The question of whether an individual is a congenital syphilitic cannot be definitely settled by a blood Wassermann. Although 99 of our 369 children were syphilitic, yet only 73 of that 99 gave positive Wassermanns. Moreover, on that 73, the positive Wassermann was not a first Wassermann in every case. For instance:

Paul

Paul, aged 15 years, testing 10 years, 7 months, and showing some psychopathy, was sent in for observation because of temper spells. He remained several months. All necessary corrective work was done. His behavior being exemplary, he was paroled to his sister. At this time he was 15 years, 2 months old and tested 11 years, 2 months. Thirteen months later he was returned as unsuccessful and too difficult to manage. At this time, 16-3 and testing 11-3, he gave a 2 plus Wassermann, and, simultaneously, the sister's physician reported that he had diagnosed her as a congenital syphilitic and had begun treatment. This boy's first test was made before the beginning of our attempt at the psychological differentiation of syphilitics, but analysis shows it to be fairly typical for the age group to which he belongs. His symptoms grew steadily more marked despite treatment, until at the age of 17-0 he was sent to the Industrial School, because the type of living there seemed better for him than state-hospital care. Reports from there show him to have become even more seriously anti-social.

Karl

Karl gave a 4 plus Wassermann when examined by his agency 9-24-18, a 2 plus on 10-21-18, a 3 plus 8-6-19, and a negative 3-23-20. He had not been given any treatment at any time. At the time of this last finding he was 10 years, 6 months of age and tested 9 years, 4 months. He runs away, is destructive, cuts new clothes to pieces, sets fires, and has extreme sex interests. A year

later his condition was unimproved, but his blood Wassermann remained persistently negative.

Harold N.

Harold N. gave a negative Wassermann on admission at the age of 9 years, 9 months. At this time he scored a mental age of 8 years, 8 months. He was definitely psychopathic. His behavior was extreme. He was cruel to other children, stole, and lied constantly. A Wassermann taken 2 months before had been negative. Two months later a blood test was reported as 4 plus. About 20 months after this, he was readmitted. The findings at this time were likewise plus. He was unimproved in any way, behavior was much worse, and his psychopathy was much more marked. At this time he was 11 years, 5 months old and tested 10 years, 3 months. Treatment brought no seeming betterment. This boy was undoubtedly as much a congenital syphilitic the first time he was tested as when he gave a positive laboratory finding.

Joan

Joan was examined when exactly 14 years of age. She scored a mental age of 10 years, 4 months at this time, with many indications of instability. She seemed to have plenty of ability but could not use it efficiently. Had a history of temper spells, running wild, of escape from local institutions, and lying. Psychologically, her tests resembled those of the syphilitic group. Five Wassermanns taken during the next two months were negative. Tonsils and adenoids were then removed, and ten days later a Wassermann was positive. One physician reported no stigmata of syphilis, but the psychiatrist reported, "Retarded puberty, numerous stigmata, Hutchinson ear symptoms, scaphoid scapulæ." History indicated that the father was "wild," suffered from a first paralytic stroke at the age of 27, and finally died of the third. The mother has "running sores" on her leg, cannot be cured. Under corrective treatment the girl developed surprisingly in the next three months, finally scoring 13 years, 1 month on the Stanford when 14 years, 6 months old. Behavior continued as difficult as ever. Stabilized by a year at the Industrial School, later reports said she was doing fairly well.

3. Etherization seems to excite latent congenital syphilis. The question of the change of a Wassermann after an

etherization is illustrated in the cases of Harold and Joan, summarized under 2. Both of these had tonsil and adenoid operations ten days before the positive finding. There is a certain tendency to discount such positives as accidental. In the case of Harold, this is impossible. One may be sure that the effect of such an operation would not persist for a year and a half. With Joan, history partially confirms the finding. In some ways this matter is one of the highest interest. Given a latent syphilitic infection, why should it not find its potentiality accentuated by the chance handicap which the operation has placed upon the individual's constitution? There are a number of other cases in our group in which the first symptoms of disturbance can be traced back to the period shortly after some such minor operation. Of course, we have no data as to the condition of any of these individuals before this operation, that is, no laboratory findings, save in the two cases mentioned.

4. The positive Wassermann after operation is closely paralleled by the seeming traumatic precipitation of aberrant conduct in a syphilitic. This, again, is by no means infrequent. The only reason why we so seldom recognize the condition is because the accident and the resulting trauma are usually given credit for the changed condition without recourse to a full physical examination, including a blood Wassermann.

John

John was brought for study at the age of 14, testing 9 years, 4 months. He was markedly unstable in his test ratings. Five years ago he fell 25 feet from a roof and fractured his skull. All of his trouble is said to date from that time. He steals constantly. Careful investigation of the situation reveals the fact that he actually had begun making trouble the year before this, and happened to fall from a roof because he was running around with other delinquent boys. His first Wassermann reaction was negative, but the next was 2 plus. The developmental and

family histories corroborate the laboratory findings. This case is seemingly one of traumatic precipitation, but the story becomes dubious when investigated. It is typical of the clinic reports one meets day by day.

William

William, on the other hand, presents a clearer instance of such shocking into activity of a latent condition. Yet even here we have an additional factor which makes the shock theory a doubtful one. Bathing in the river, he was mistaken for an animal and hit with a bullet. A right monoplegia resulted. The boy was normal until that time, and ready for high school. He went on to high school but could not make good, and began to complain of "having lost his senses." He threatened the man who shot him with a revolver. Examined at the age of 15 years, 10 months he tested 10 years, 5 months. He gave evidence of deterioration. The Wassermann was positive. Under treatment, symptoms of irritability, irresponsibility, and inertia decreased. He has since been able to earn his own living, paroled to the care of his father, who is himself a 4 plus case and evidencing deterioration. We have, of course, in this case, the possibility of continued absorption from the bullet, lodged in the brain. The relapse of symptoms under treatment rather negates this, however.

5. Some congenital syphilitics evidently never give a positive Wassermann. This could not be stated dogmatically as more than a probability. However, the possibility of it must be kept in mind if one is not to be lured off into the assumption of the absence of syphilis when repeated negatives are given.

Gordon

Gordon, 14 years old, testing 9 years, 2 months gave marked indications of psychopathy. Although he was so constitutionally inferior that he had many and marked stigmata, yet he gave repeated negative Wassermanns even under provocative treatment. The history as given at first was negative. The psychological findings were so definitely like those of the congenital syphilitics that an emphatic demand was made that the father submit to a blood Wassermann. He dreaded this so that a com-

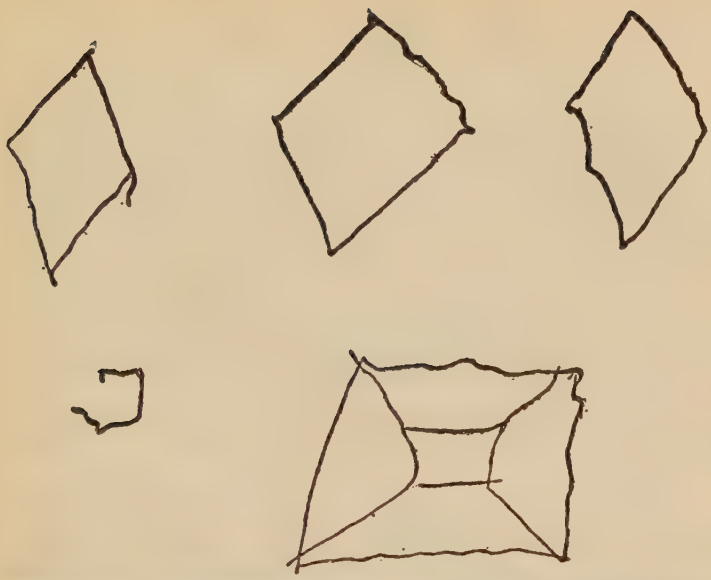
promise was effected. At his suggestion, he gave, instead, a detailed and actual history of the case. He had had an infection before marriage, "with treatment which cured." Following this history and its corroboration in the major details, the boy was put on treatment. The therapeutic value of the treatment soon evidenced itself in the marked physical change in the boy, his increased alertness, loss of grouches, moping, and sullenness. Cessation of treatment due to an involuntary parole brought renewed physical symptoms, a return to the Bureau because of new delinquencies, and a return of the old mental symptoms. There had been a total of five widely spaced negative Wassermanns in this case.

6. Both negative blood and negative spinal fluid findings may be present in a congenital case.

SAWYER

Sawyer was first examined when 8 years, 11 months old. He then tested 8 years, 4 months. He had been stealing from the age of 7. There was marked psychopathy, with a superficial inhibition of all activity which made him seem like a very shy normal child. Observation covering a year brought nothing but negative medical findings, including repeated blood Wassermanns and a spinal-fluid study. Yet the psychological findings indicated the syphilitic type. After 11 months a family history was obtained in detail. This gave the usual history of miscarriages followed by the birth of living children. Sawyer was the first living child born. There was also a history of a period of inability on the part of the father, serious enough that the physician wished to probate him. He had delusions about inability to work, had also "had a fall" before this. A blood Wassermann obtained from him at this time was 2 plus, although the mother's was negative. On page 417 are typical diamonds and designs drawn by Sawyer. The amount of qualitative disturbance is minimal for syphilitics.

7. The family denial of infection is sometimes so knowing that one seems to be justified in reading behind the lines. The experienced worker knows this, but for the sake of those who meet these conditions less frequently it seems well to furnish an illustration.



ATTEMPTS AT DRAWING MADE BY SAWYER AT TIME OF FIRST EXAMINATION, WHEN 8 YEARS, 11 MONTHS OLD AND TESTING 8 YEARS, 4 MONTHS.

ATTEMPTS MADE BY SAWYER AT SIXTH EXAMINATION, WHEN 9 YEARS, 8 MONTHS OLD AND TESTING 9 YEARS, 9 MONTHS.

RACHEL

Rachel was sent in by her foster parents. She had been taken because of their inability to tolerate seeing such a promising youngster living in squalor and neglect. Her real mother had been insane, and the child was born in the State Hospital. The first laboratory examination revealed a 4 plus Wassermann. A letter to the father brought the following reply, copied verbatim:

I am certainly surprised to hear the condition Rachel is in. There has never been anything of that kind on either side so she must have gotten it recently. I should think if she had had it for any length of time, it would have show up on her body or face before now.

I would like for you to find out if you can, where she got it; by making her tell.

Can you tell By a examination whether she contracted it by intercourse or not, and how long it has been standing? If so please answer immediately.

This indicates a fairly clear idea of the disease for a man of the lower level of mechanics. Unfortunately, the mother was discharged from the hospital before the time blood Wassermanns were in vogue. Other cases spoil their denial absolutely by their emphatic statement that they never had the disease, while all the time they are calling it familiarly by some one of its common street designations, unknown save in certain disreputable quarters of the community.

8. The grandiosity of manner and the underlying enlargement of ego of the syphilitic are usually accompanied by a handwriting that portrays it. Note the case of Harry D. This case, by the way, gave negatives four years, and then a positive.

9. The handwriting of many syphilitics has a characteristic angularity. With this there is a misspelling of accustomed words in even such well-known items as the individual's own address. The tendency to misplace or duplicate letters is much more marked in individuals of this type than in other unstable individuals *of the same mental level.*

Bianchi reports this.[7] It seems well to quote his findings on the syphilitic exactly.

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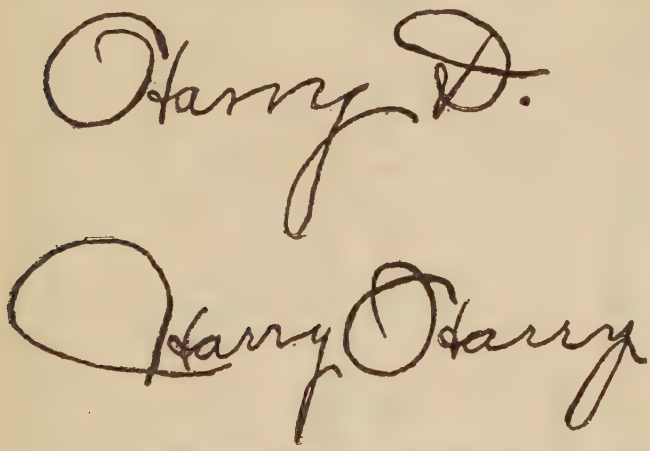
[7] Leonardo Bianchi, *A Text-Book of Psychiatry for Physicians and Students,* translated by James H. MacDonald, pp. 791, 793, 804.

When he writes he leaves out letters or syllables in the formation of words, or entire words in the composition of phrases. . . . Tremor is one of the most important of the somatic phenomena. . . . This tremor is not manifested in a state of repose, but during voluntary movements, and especially at the very beginning of a movement. . . . It is particularly in the most delicate and complex movements, such as writing, that the tremor is apparent.



HANDWRITING SPECIMENS OF HARRY D.

10. There seems to be a definite relationship between congenital syphilis and glandular disturbances. The most marked case of this was Gladys.

Gladys

Admitted at the age of 14 years, 11 months, she tested 10 years, 3 months. The type of psychopathy indicated congenital syphilis. She was incorrigible, with mild delusions of persecution, unpalatable food, mistreatment, etc. Physically, her lack of development, slant palpebral fissure, and short fingers gave the diagnosis of mongoloid. The Staff disagreed on this, since the major signs of Mongolism were missing. She was not highly imitative, did not have typical walk, head shape, fissured tongue, or thick hands. Laboratory tests were negative. Later X-ray findings indicated a skull condition which was "undoubtedly syphilitic."

1. Iron ore is found in Mishington Mishigon, wisconson, Minnisota

New Hompshier

Do come and see us wheever you can fingt time

Mother hurrea albout as buy as a bee untill the house was ale in ordor

EVERYDAY SCHOOL WORK OF MACK, 11 YEARS, 9 MONTHS OLD, TESTING 12 YEARS, 3 MONTHS. UNSTABLE AND SYPHILITIC AND UNABLE TO KEEP UP IN SCHOOL WORK FOR THE LAST TWO YEARS, BUT NOW DOING WELL BECAUSE OF, OR SINCE, INTENSIVE ANTI-SYPHILITIC TREATMENT. WASSERMANNS WERE NEGATIVE, EVEN UNDER PROVOCATIVE TREATMENT, BUT THE FATHER DIED OF GENERAL PARESIS SHORTLY AFTER HIS BIRTH, HAVING HAD INFECTION BEFORE MARRIAGE.

11. Treatment may affect certain mental attributes and not others.

NAOMI C.

Naomi C., mentality 7, actual age 9. Marked episodes of running away and some stealing and temper spells were her trouble. Wassermann was 4 plus, and treatment was begun. She was under observation at intervals for a year, treatment being supervised. Mental level changed but little, save that it showed a cycle, the successive tests being 7-0, 7-6, 7-2, 7-0, 7-6. On the behavior there was no perceptible change. On the association series, however, there was a definite and constant change for the better. The actual value of her responses about doubled in the year. The change was gradual and evidently not due to learning as successive tests, given at short intervals, were similar.

12. Treatment may have no sudden effect upon behavior. The general hope in treating a syphilitic is that the social problem will thereby be alleviated. If we could prove this, state appropriations for such treatment would undoubtedly be forthcoming. The fact is, however, that one dares not be too hopeful. To illustrate:

DONALD

Donald was a 17-year-old boy referred because of stealing an automobile. Physical diagnosis was not difficult. He gave a 4 plus Wassermann, his father had died in a state hospital of general paresis. Mentally, he tested 11 years, 8 months and seemed to have sufficient intelligence to get along in the world, if his psychopathy could be eliminated. He was put under intensive neo-salvarsan treatment. After a prolonged period of observation, corrective education, and the medical treatment, he was paroled home but could not get along. Returned, treatment was resumed, but he ran away. He has since wandered over a good bit of the country, was in the army a while, and has recently been committed to the State Hospital for Insane.

HAROLD

Harold is a younger example of the same tendency. At 14 years, 7 months he tested 13 years, 5 months. Extreme irri-

tability was indicated in tests and behavior. Intensive neosalvarsan treatment was carried out at the Bureau, and treatment was continued at home. One year later he was readmitted with more marked behavior and mental symptoms, yet the Wassermann had become negative and continued so. At this time he was sent to the State Hospital.

13. There is a possibility that some of our etiologically unclassified mental diseases may be syphilitic in origin.

SAMUEL

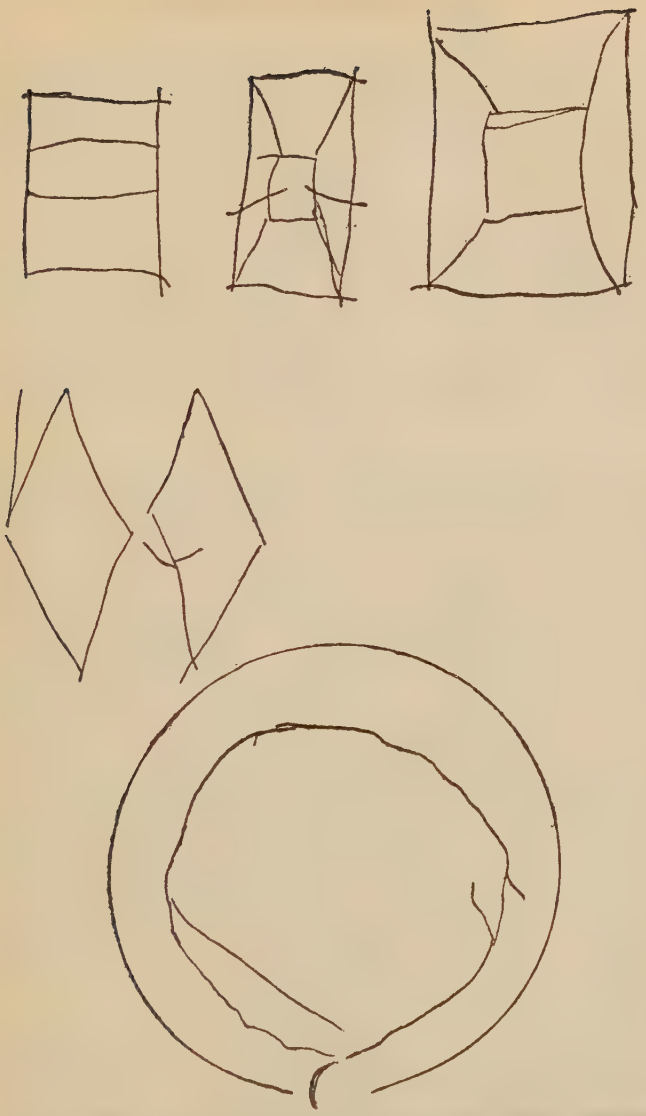
Samuel was admitted to the institution diagnosed as a case of Marie's congenital cerebellar ataxia. The symptoms were typical for that condition. All laboratory tests were negative. A younger brother of the boy is beginning to show the same motor symptoms. Mentally, the two boys had almost identical mental distributions and levels, yet one was 14 and the other 10. The older child has had repeated blood and spinal-fluid examinations which are all negative. Yet, the father tells a straightforward story of infection and treatment before marriage. Is it not possible that we may have, in such instances, non-spirochetic persistences of syphilis?

14. Younger siblings of matings where older children are definitely known to be syphilitic may give negative Wassermanns. In our group of delinquents we have no opportunity to generalize on this phase of the matter, for there are only half a dozen instances of such relationship. They are enough, however, to show the possibility.

GERALD

Gerald was one illustration of this. He belonged in the syphilitic group according to psychological test findings, yet all laboratory tests were negative, and there were no pathognomonic stigmata. A year later his older sister was brought in, for clinic examination only, and was found to be a congenital syphilitic, with positive laboratory findings. The drawings made by this boy were highly suggestive.

Ten such family groups were numbered among the 216 children studied as dependents. Psychologically, these



DRAWINGS MADE BY GERALD, AGED 9 YEARS, 0 MONTHS, TESTING 7 YEARS, 6 MONTHS. PSYCHOLOGICAL DIAGNOSIS OF SYPHILIS CONFIRMED BY FAMILY DATA A YEAR AFTER THE TIME OF EXAMINATION.

younger children give indications which are similar to those given by their older siblings who have positive Wassermanns. The case that does not show such symptoms is yet to be found, and the writer is about ready to adopt the belief that the child of a syphilitic is never normal, functional disturbances or imbalances will occur, and there is a constitutional tendency to psychopathy.

15. There is some reason to believe that early and persistent treatment of congenital syphilitics may have in it sufficient power to bring alleviation of the condition and enable the individual to adapt normally to social demands.

David

David came under the care of a state society at the age of 9 years. When examined the next week, he scored 7 years, 10 months on the Stanford. Physical examination revealed a 2 plus Wassermann, a specific iritis, and other complicating minor symptoms. He was put under treatment and has been under treatment, with proper rest periods, since then, combined neosalvarsan and mercury being used. At the age of 10 years, 3 months, he tested 9 years, 2 months on the Stanford. He had begun being troublesome in his boarding home. Repeated observations paralleled the treatment and supervised care in boarding homes. The delinquencies were definitely serious and continued several years. At the time of the last examination he was 11 years, 9 months old and scored 9 years, 2 months on the Stanford. Mental development seems to have ceased. Other tests have not changed noticeably in quantity or quality save that he is better on academic accomplishments. Since this last examination there has been a definite improvement in his behavior and he is now, at the age of 14, reported as getting along and causing absolutely no trouble. Note that the delinquency was coincident with the time that mental development was stopping.

16. One must not forget that there is a possibility of congenital syphilis being complicated by a renewed infection. Our 13-year-level group has in it the one case we have in whom this is a possibility. Clinics thought him a peculiar case because of the rapidity of the deterioration. A

substratum of a predisposed organism seems to offer a reasonable explanation of why this happened. The family history, carefully investigated, reveals many corroborations of this possibility. The boy bears some stigmata. Fournier notes such occurrences.

17. There seems to be a general tendency in our group of syphilitics to meet, at least halfway, any homosexual opportunity. One cannot help but wonder whether there is not a possibility that a syphilitic infection, by its very nature, affects that part of the system which, in its abnormal functioning, makes more certain the continued opportunity for the disease to flourish. Is it not possible that such selective evolution is one reason why the disease continues? The syphilitic, of primary or congenital infection, tends to sex abnormalities or indiscretions. He thus safeguards the future of the disease from which he suffers. The extremely rapid deterioration of Roswell X. might be explained by some such hypothesis. The organism, already affected by the disease, yields more readily to a renewed onslaught. Even if we grant an infection four years back, what made him abnormal enough to incur that infection?

18. There are a number of cases where the medical findings are entirely negative, but where the condition is indicated by the psychological findings. Of course, since the diagnosis by such psychological symptoms is in its infancy, actual determination of the case condition must wait until further evidence decides the case one way or the other.

Clarence

Clarence is a good illustration of this and also of the fact that treatment to the point of a negative Wassermann does not mean cure. Clarence was 11 years, 11 months old, when sent in for attempted rape. He scored 9 years, 2 months on the Stanford. His psychopathy was marked, and distribution and quality on tests were similar to those of known syphilitics. The medical findings, including spinal fluid, remained persistently negative. After the child had been disposed of, the history came in from

the Clearing Bureau. He had been a 4 plus case in 1916, and treatment had been continued until the blood tests were consistently negative. Yet the psychological findings indicated the same condition as in untreated cases!

19. The psychological diagnosis of congenital syphilis is a logical development of modern tests. The criticism has been made that it is insane to think it possible to diagnose syphilis by psychological tests. If by "insane" the critic would be willing to agree to the definition "not thought of by the ordinarily sane," the writer, too, would agree to the criticism. The possibility was one that could not rationalize itself out of clinical training in psychology. It took open mindedness in the study of cases to get the suggestion for such analysis. But is it illogical? Neurologically or physiologically, no.

The physiological basis for any such assumption is not hard to develop. All of the medical and physical studies of congenital syphilis show that there is very apt to be a disturbance of the reflexes. The most common of all neurological tests because of this significance is the patellar reflex. According to the stage, kind, and location of attack the congenital syphilitic may show exaggerated, diminished, or normal reflexes.

Let us leave this fact and return to it later.

The Russian physiologists have been working with the artificial development and inhibition of reflexes. Their studies have been developed chiefly upon animals, but there have been some applications, showing the similarity of conditions in humans. There are a number of their findings that are of especial interest to psychologists. The reflex is the primary type of nerve action and in its ultimate form is inherited, ready to function under the proper stimulation, when the creature or human being is born. All other neural response is but a complication of such simple responses, or simple reflex action with the addition of one or

two more neural links, so that instead of stimulation, conduction, response, we have stimulation, conduction through *a, b,* and perhaps *n* areas, before we elicit response. These more complicated patterns of nerve action are not predetermined, that is, their stimuli may be varied. Pavlov has shown definitely that any stimulus from the external world may be made the exciting cause of any type of reaction, even of that which we think of as purely autonomic or reflex. The Pavlov school has also shown that these stimuli work under certain definite laws. There is no chance effect from any chance affect. When a reflex is conditioned or caused by some definite item in the external world, that reflex is called a conditioned reflex. Conditioned reflexes are the basis of our experiential development. They are our neural life. They are subject to changes, they form through experience, become more definitely fixed through repetition, lose strength through disuse, may be inhibited through the development of other reflexes, or may be reenforced through them. Psychologically speaking, these conditioned reflexes form the sum total of our learning, remembering, forgetting, and relearning to modified conditions, that is, adaptive learning. These processes are the basis of our mental life. Speech itself is a group of conditioned reflexes with the finest of motor differentiations for differences of the sum total of conditioned reflexes active at that time.

What bearing has this upon our problem of congenital syphilis?

If congenital syphilis is severe enough in its affects to manifest itself through disturbance of the primary reflexes, why would it not manifest itself through a disturbance of these less stable, more variable, less predetermined conditioned reflexes? The same delay or acceleration or normality of response should be found, all of it exaggerated and increased by the fact that there are more neurones in-

volved and hence a greater chance of more of them being "abnormal." All that any psychological test can obtain, on any case of neural disturbance, is merely an aggrandizement of the symptoms grossly present. But, because of the refinement of approach, symptoms may be found when they do not show through standard physiological tests. The paretic has mental symptoms, so has the neurosyphilitic. Whether a case of bone or organic syphilis has is a matter to be determined. The probabilities are that we have all manners and degrees of involvement, and that the various strains of affection from syphilis are so complicated that years of work may be needed to analyze any of them into definite facts. But, the fact remains, syphilis, congenital syphilis, has its effect upon the intelligence. It disturbs function and consequently level. Our present tests, carefully applied, carefully analyzed, studied without prejudice, reveal these traits.

One thing must be emphasized. Syphilis is present in many delinquents. Its presence seems to mean a certain type of psychopathy. Nevertheless, *syphilis does not cause delinquency. It causes psychopathy. The aftermath of that psychopathy is delinquency when there is not sufficient constantly alert supervision.* Yet, fundamentally, the syphilis is to blame. Knowledge of who is syphilitic, preventive treatment, corrective treatment, supervision, and understanding will finally have their effect upon delinquency, since they will modify or safeguard psychopathies that are merely opportunities for delinquency.

Can the syphilitic be cured? None knows. But recognized and understood, he can be handled preventively. The recognition of him has undoubtedly been a problem of extreme difficulty. The development of the Wassermann technique and other laboratory procedures has greatly increased the ease of detection. It has done away with the idea that there is no congenital syphilis without sores and

terrible malformations. Solomon has done a tremendous amount to emphasize the frequency of syphilis in the children of syphilitics.[8] Yet his work is entirely too conservative, for it depends upon the ability of laboratory tests to indicate the presence of the disease.

The congenital syphilitic, the child who does, or does not, give a laboratory sign of his condition, has, in many cases at least, mental signs that are as unmistakable to the expert as a Wassermann reaction. A few such scattered psychological findings on cases of original infection have been mentioned in the summary of test analyses. In general, however, but little has been done to determine the mental attributes of the congenital syphilitic. There is at hand a facile pen picture of him, drawn with the ink of experience by the man to whom too much credit for work on congenital syphilis cannot be given, Edmond Fournier.[9] He groups the symptoms of congenital syphilitics under three heads. First of all, there is the neurasthenic form which occurs as an auxiliary form of true hysteria. The chief characteristics of such cases are nervous exhaustion, general depression, weakness, dejection, and irresolution. These symptoms are commonly known and frequently met. Secondly, there is the group of true hysterias. There are undoubtedly hysterias which are purely syphilitic in origin. And last, there are those who are affected in such fashion that it is their behavior which describes the disease. They suffer from a degenerative condition of intellectual, moral, and emotional attributes. Fournier claims that this group is more numerous than either of the others. These individuals suffer from a psychic ataxia. They are different, extreme in views, fan-

[8] Harvey C. Solomon and Maida H. Solomon, "The Effects of Syphilis on the Families of Syphilitics," *Social Hygiene*, October, 1920, pp. 469-487.

[9] Edmond Fournier, *Recherche et Diagnostic de l'Heredo-Syphilis Tardive; Syphilis Hereditaire de l'Age Adulte.*

tastic, unbalanced, flighty, easily distracted, only half sensible. They suffer mental lacunæ, they are half-intelligent on many subjects. They are lacking in conscience, dull in moral appreciation. They are without definite aim or purpose. They are mentally unstable, overadaptive, lack balance. Their ideas are "ataxic."

If such subtle descriptions of the mental process of congenital syphilitics could be given by one whose work ended about the time modern clinical psychology developed, how much more definitely should we now be able to work out the exact description of the same condition? The future of clinical psychology lies in the study of just such problems. Congenital syphilis is but one factor behind psychopathy. It is premature to suggest what others may be, yet all nephritis cases studied *do* seem alike, tubercular children have symptoms that differ but which seem similar for their group, thyroid cases put one through the same round of exasperation again and again. Is it impossible to analyze these vague similarities back into clinical facts? There is no reason why we should think so. Psychopathies may be incidents in normal individuals and resolve themselves into nothingness. They may be actuated by shock, worry, or disease. Their clinical differentiation is a problem that challenges the modern psychologist. For the writer, the syphilitic psychopathy is an entity, now rather easily identified in most cases. Corroboration on the physical side is often slow and difficult, yet it can usually be obtained. The findings in this group have been helpful enough in the work on later cases to repay for any effort expended in the attempt at identification of the congenital syphilitic. Not only that, but the results obtained are more than enough to motivate further study. The investigation of psychopathy demands open-mindedness, accuracy, and thoroughness in work, impartial consideration of all aspects of each case. Given these, any laboratory, any

worker may feel sure that time and work will bring to light explanations of the problems so constantly demanding our attention—inferiority, dependency, psychopathy, delinquency.

CHAPTER XXI

CONCLUSIONS

To attempt the deduction of conclusions from this study is, in one sense, almost absurd. In view of the limited part of the subject covered, no conclusions can be reached that are not merely tentative, partial, and suggestive. What seem to be final issues now should, with further study, prove to be but the first indications of the larger aspects of the problem in general. They will, let us hope, lead to a wider perspective from which the whole subject may be studied anew. To find that the presence of *a* means the probable presence of *b* is probably a determination well-pleasing to the individual who is interested in the practical usage of this relationship in the applied professions, but to the scientist there is a more enticing side of the matter. When *a* is present, the presence of *b* is certain, in a certain percentage of all cases. But, from other sources he knows that the presence of *b* means the probable occurrence of *c, r, s,* or some other term. He also knows what the presence of some of these terms is apt to mean. What happens? As a result of the determination of even the partial relationship of *a* and *b,* there opens out before him the whole expanse of the multiple relationship of all of the terms. His work is stimulated by the infinity of possibilities. Speculation invites and leads him on to necessitous research, for the adventure of discovering new relationships awaits him.

To the writer, the experience of this study has been just that. The narrow and wearisome treadmill of applied psychology as it meant the faithful application of tests given again and again, with diagnoses waiting inevitably accord-

ing to the quantity of ability found, has changed into a fascinating, if bewildering, challenge of many possibilities. Items formerly of unimportance become full of significance if one studies them with the eye of the microscopist. Qualitative analysis adds just that much to the significance of our present tests. To realize this in more practical form, let us briefly summarize the "catch phrases," or the steps of presentation of this study, strip them of their arguments and illustrations, and see where they lead, what they suggest, what they mean for everyday usage.

The keynote to an understanding of clinical psychology is perspective. Any such applied branch can be comprehended only when one has a true vision of its source, its aim, and its relationship to other matters of life and living.

Psychology is a recently developed branch of biology. Its first aspects were physiological. Far more recent are its introspective, educational, economic, and social interests.

Its origin tended to foster an attitude of pure research with emphasis upon extreme refinement of technique and accuracy in its application. These are the qualities which have made its work as successful as it has been.

From the very first, psychologists studied human deviates intensively. The earlier forms of study were psychiatric in procedure and centered about the problems of the insane.

Less than twenty years ago the first definite attempt to study individuals scientifically, yet practically, was made by Binet.

His success was undoubtedly due to his ability to correlate scientific methods with practical aims and to adopt both to the immediate demands and needs of the social group.

The Measuring Scale of Intelligence revised the whole world's attitude towards psychology. Its praiseworthy

traits were simplicity, brevity, statistical method, and practicality.

The rapid adoption of the method had its unfortunate consequences.

1. The acceptance of poorly trained workers.
2. The overexploitation of the tests.
3. The temporary assumption that mental age was the whole of the problem of mental diagnosis.

As a result the detection of the feeble-minded received tremendous impetus. Then the appalling number of feeble-minded revealed by the tests led to widespread campaigns for the provision of institutional care for such cases. As a result, the public is fairly well instructed in the "social primer" of the needs of such cases.

The rapid acceptance of the tests in clinic procedure followed. Revisions and supplementary series of tests appeared in increasing numbers.

At present the Stanford revision is probably the best for American usage. Although it is not perfect, yet it seems wise to use it long enough to solve some of the problems raised by mental-age tests, before we complicate interpretation of findings by changing the method of determining mental age itself.

There is still a general acceptance of the idea that some such scale is the whole of clinical psychology. Workers who hold this attitude are handicapping child welfare, education, social provision, and clinical psychology itself. The psychologist needs the orientation which comes from studying all aspects of the problem confronting him, instead of living wrapped in a small portion of it.

The army usage of tests gave a tremendous incentive to the development of such methods of diagnosis. To a certain extent it revealed the relation of mental age to industrial and social efficiency. The value of this relationship

justified the practical usage of tests after the war. At the same time, the war usage of tests sponsored the use of group tests in a way which has handicapped much of the work done since then. The trouble is that the average mental examiner knows so little of his field that he sees no difference between the application of group tests, and the interpretation of their results, and the clinical study of individuals by other methods. The group test is a preliminary, survey method, valuable as a means of indicating those who need further, more intensive, individual observation. It has a definite purpose and value, but it can never replace the individual test in clinical value. The fallacy lies in trying to interpret a group-test rating into the finality of a diagnosis. Even more wild is the prognosis based upon such information.

Clinical psychology is the study of an *individual*. It is not limited to a study of his mental age or mental rating on any one test series. It is the study of the individual with attention directed to his attributes, as they make him the person he is, and differentiate him from others. Its aim is a true understanding of him and his behavior. Behind this study lies a purpose, all too seldom recognized, the desire to help him in preventive or corrective fashion.

When clinical psychology settles down to painstaking, detailed, comprehensive study of and help of individual persons; when it places the spectacular, thrilling, large-number survey at its outer door as a mere card of introduction; then it will have partially grown past its adolescent flurries and instabilities.

Clinical psychology as a study of the individual is slow, difficult, non-exciting, but it accomplishes something. Group tests give a hint of the presence of feeble-minded, psychopathic, and psychotic individuals, but clinical psychology in its proper guise determines with definiteness the existence of these conditions. Moreover, it also deals with

the backward, the delinquent, the nervous, the special defect cases, any and all problems of mind, acting. The unit of any human problem is always the behavior of an individual. Corrective work is also a matter of the individual. Correction is a matter of habits, of ways of learning and forgetting, of feelings and their usage. This holds whether the problem is one of education, dependency, or delinquency.

To meet the demands made upon it the practice of clinical psychology must be scientific, thorough, preventive, corrective, and at the same time it must educate the public. Moreover, all of this must be done in an economical fashion. This means the need of better methods, better technique, self-instituted improvement in all the clinical psychologist does. The time is favorable. Present-day reports and studies show that mental age is a fallible quantity. Variability is much more prevalent than any one has believed. Consequently, there comes the demand for detail and depth of study. Of this demand we may well be proud. The obvious thing is to meet it. Just what do we know that will help in this fashion?

The psychological clinic as a diagnostic agency has reached no final goal. Its aim is the elimination of the problems it handles. So far it has not even recognized many of the tasks justly belonging to it. Mental-age determination will undoubtedly be in constant usage for many years to come. This usage will gradually become more of a preliminary routine, and the time of the expert will be devoted to methods involving more refinement, a wider understanding of human beings, and a greater utilization of other scientific aspect of human observation. Feeblemindedness will not be considered the primary root of all evil. High intelligence quotients will not be made a basis for pushing children into social and educational groups where they do not fit.

Clinical psychology must study such problems as immorality, fears, flights, truancy, temper, pathological lying, and stealing, from their genetic aspects. Delinquency, too, must be viewed as something other than an expression of intelligence inferiority. It is the child who is not normal, not feeble-minded, not insane, not seemingly handicapped, but who is yet a problem in the community, that furnishes the supreme challenge to the efficiency of clinical psychology.

In this group are many of the problems of everyday life. There are the child who "lacks concentration," the bright child who is "generally troublesome," the bright child who fails on some one school subject, the aphasias, the "lazy" child, the clumsy, the slow, and the obstinate children. Nor should one overlook the cases that are potentially capable of developing into psychopaths, psychotics, or feeble-minded.

There *are* differences between feeble-minded and normal individuals which do not show on tests, so far as any quantitative evaluation can indicate them. The slide rule efficacy of the I.Q. has startling exceptions. Any case in a clinic may be that exception. Consequently the I.Q. and other mental-age forms of rating intelligence indicate merely the *present* condition of the individual. Something more is needed before one can predicate or hypothecate his *future.*

The laboratory of clinical psychology that wishes to build up a successful future for itself must emphasize constantly improvements in methods, technique, the quality of work done, and coöperation with other agencies.

Diagnoses are but the beginning of service. The determination of corrective or preventive methods must follow immediately, or the diagnosis is useless. There is no service to society without this. Any clinic that realizes this practical need and tries to meet it will develop a personal-

ity of its own, a characteristic manner of dealing with the problems confronting it. Only when permeated with an ideal of self-denying service, felt by the least important member of the organization, will the best type of work be done.

The clinical psychologist makes the personality of that laboratory in which he works. It is dependent upon him for its formulation of the ideals which shall control its advance lines of work. He must, to further his own work, be broadminded and as broadly educated as possible. His specialized training should include more than the modes and methods of his special work. He must be intelligently ignorant, sympathetic but impersonal, not overemotional nor yet unemotional, capable of holding a critical perspective. He must be tactful and in sympathy with his patients. His relation to them should be one of evoking confidence. He must be widely enough trained to be automatically cognizant of and plan for all sorts of chance clinic problems, such as fatigue, hunger, antagonism, shyness, illness, and difficult parents. He must naturally combine the handling of the patient with the education of those responsible for him. He must always be fair, just, patient, repaid for all effort made by his interest in the individual handled. Perfunctoriness is the final test of clinical unfitness.

The matter of clinical equipment is one of relative importance only, and is relatively insignificant. The usage of standardized tests is a general essential. Standardization has been a fundamental reason for the success of clinical psychology. However, tests cannot compensate for untrained workers. Tests used should gradually be changed as new methods are evolved. Each test used should first be critically weighed from the standpoint of the value of results obtained from it, their reliability, the time needed to obtain them, the fatigue and expense involved, and the

possibility of practical utilization of the results. Only when it meets these criteria should it be adopted.

No tests are infallible. Which tests shall be used is largely a matter of the prevailing opinion of psychologists at the time they are adopted. Many tests must be used. A tentative program for present-day examining should undoubtedly include some one of the Binet revisions, performance tests, educational achievement tests, a general orientation series, and probably a morphological series, with special equipment for special types of individuals, such as the blind and deaf.

Surroundings, blanks, files, record systems, should all be modern, complete, economically self-checking, and efficient.

The examination itself is the reason for the existence of the clinic. Need one stress its consequent importance? Skill in gaining rapport with the patient, in maximizing results while minimizing effort, fatigue, and time are the chief requisites. The difference between haphazard and serial methods of giving a mental-age test series is a good illustration of efficient economy. Care must be taken to alternate the types of demand made upon the subject. The *purpose* of the test must partly decide the place that item holds in the general procedure of an examination. The value of some tests is enhanced by fatigue, whereas the value of others is negated. It is a matter of knowing what one wishes to determine from the examination and adapting accordingly. When all is said, the technique, and hence the efficiency of an examination, is dependent upon the *intelligent adaptation* of the test materials to the problem in hand. It is therefore a direct result of the *intelligent adaptability* of the examiner.

The demand for clinical accuracy necessitates a verification of results obtained. This proving of the findings is more than a mere mathematical checking of the accuracy

of test scorings. The psychological diagnosis of an individual becomes a formal clinical diagnosis only after the *tentative* psychological estimate has been verified, modified, or accentuated by correlating it with all other known data on the case. These data should, in the ideal case, cover all of the important phases of heredity, conception, pregnancy, birth, infancy, childhood development up to the present time, educational experiences, social reactions, ethical, moral, and economic aspects of his behavior, and his present physical condition. Sometimes the data so obtained enable one to emphasize more strongly the condition found in the psychological examination. In other cases the psychological findings are explained by extenuating items in these other fields. Sometimes it is only clinical skill and psychological familiarity with abnormal tendencies that prevent the acceptance of information that is distorted because the informant, himself, is in a pathological condition.

Having evolved a conservative diagnosis which relates all known facts about the case to each other, its usage must be conservative. A diagnosis is a statement of the present condition of the individual. With accurate diagnoses, a feeble-minded person is bound to remain feeble-minded. This is the only diagnosis in which the present condition unequivocally indicates the future, the prognosis. In all other conditions prognosis is a tentative extension of the diagnostic findings into the indefinite future. A prognosis is not certain, assured, or definite, but, until we have many more years of scientific observation of individuals, it must remain valuable only when it is pronounced by an expert.

Even a brief survey of the literature convinces one that examiners as well as psychologists are beginning to realize the evanescent character of results so far obtained. Children testing normal do not stay normal. Feeble-minded

children improve, even to a normal level. Precocious individuals cannot live up to their level.

Many and varied suggestions have been made. Study all aspects of a case, concentrate on character analysis, emphasize the individuality of the child, recognize exceptions, stress industrial tests are a few of the suggestions which indicate a restless desire for something more than present clinic procedure accomplishes.

Binet pointed out the most feasible line of psychological development many years ago in his work on the study of function. His years of experience in evolving the mental-age series gave him the perspective which our later-gained experience is now bringing to us. It is not intelligence level but intelligence function which differentiates the imbecile and the dement. It is a difference of function that keeps individuals of the same mental level from being similar in ability, behavior, and personality. One succeeds, another fails; one adapts, another resists. Their functional condition, not their mental level, determines their activity.

It is the study of function, cross-sectioning our present mental-age studies, that will relieve us by solving problems which mental age can only raise. Disturbed mental function, or psychopathy, has its psychological aspects just the same as disturbed mental level has. Mental level is the determination of how much intelligence a person has. Mental function is the analysis of how effectively that intelligence works.

Mental level gives one a knowledge of feeble-mindedness, backwardness, brightness, and their concomitants.

Mental function gives one a knowledge of the reliability or unreliability of the mind studied, whatever its mental level.

Mental level varies from a development barely equal to that of a newborn child up to superior-adult level.

Mental function varies from normality to insanity.

There is a possibility that function may sometimes be even more efficient than normal, and that in such individuals the unusual efficiency is an important factor in their unusual superiority.

All or any variable quality of function may occur with any amount of intelligence, that is, at any intelligence level.

Psychopathy, when conceived as a variability of functional efficiency, helps to explain many of the problems and difficulties which clinical psychologists seem to be finding. It throws light on the reason for people being lazy, nervous, and queer. It suggests a reason for irregularity of development and behavior. It gives a clue to character defects. It explains variability of ability and responsibility in those testing at a similar mental level. It is the analytic report on individuals whom the synthesis of test findings has given a rating in level. It is the qualitative study of a quantitatively determined condition.

The first necessity in studying psychopathy is precision. Tests used must be used uniformly and with strict adherence to standard methods. The next requirement is the giving of a multiplicity of tests to each subject. The third need is for an impersonal recording of all of the details of behavior incidental to the examination.

Such a study of an individual will necessarily be much slower than a simple mental-age rating.

The psychopathic child is not a newly discovered sort of human being. The newness lies in the fact that his instabilities are easily studied in the psychological laboratory. They are almost as readily ascertained as is his intelligence level. Clinical psychology is ready for such research, and is more easily able to handle his peculiarities than is psychiatry. The symptoms of the psychopathic child are only as shadows when compared with those of actually psychotic adults. The clinical psychologist has been trained to deal especially with the child mind, however, and to him

these dim, shadowy tendencies are entities easily recognized.

The old theory that such traits as those exhibited by psychopathic children will be "outgrown" is a pernicious handicap to early mental and educational hygiene. Even if some children might eliminate such symptoms without external aid, it seems foolish to let them grope along so handicapped.

Although from the earliest years of mental testing Binet, and then Stern, urged the qualitative analysis of test findings, it took a decade of testing before there was any definite attempt at such study in America. The results are still but partial and scanty, but they suggest the directions which may repay further investigations.

The Bureau found ten lines of psychological estimation which gave information as to the qualitative aspect of the subject's intelligence. These are:

1. The range above the basal on the Stanford
2. The distribution of successes and failures on the Stanford
3. The quality of individual responses on the Stanford
4. The distribution of the word reaction values on the Kent-Rosanoff association series
5. The quality of the individual responses on the Kent-Rasanoff association series
6. The presence of imbalance on various performance-test ratings, and the relation of such scores to the Stanford mental age
7. The educational ability of the individual viewed in the light of his mental age on the Stanford
8. The general orientation of the individual
9. The patient's own story of himself and his experiences
10. The behavior during the examination, supplemented by reports of behavior while under institutional living

These ten points are not absolute, final, all-inclusive, nor of equal significance.

The more frequent a seeming deviation, the less probable

is its extreme pathological significance. The less common a deviation, the more significant it is apt to be.

We need intensive and extensive work before any final statement of what is or is not significant as an indication of psychopathy can be determined with finality. Practical experimentation and observation are needed.

Delinquents give a basis for such practical and scientific study. Delinquency is a behavior problem. Behavior is a mental problem. An individual acts as he does because of certain ingrained tendencies. These tendencies or attributes of his nervous system are due to inheritance, disease, experiences, or to his intelligence itself. They may be affected by anything or everything in his environment. The delinquent is a social deviate. His deviation is a deviation of his nervous system. His behavior varies because of the presence of some factor in him as an individual which makes him different. He is fit material for the study of such differences.

Just what does a study of delinquents such as that reported in this book reveal? One fact is self-evident. No study of just one or two factors in the situation will ever solve the problem. The mere fact that a delinquent *is* a delinquent determines that. Of course, there is a relative importance of each and every item of an individual's attributes, but no one of these has a preponderance of power, such as can cause delinquency in a whole group of cases, or prevent it in another group. A brief review of several individual items will make this more explicit.

Age is no precludant of delinquency. Children who are only 4, 5, or 6 years old may be, and are, as definitely behavior problems as those who are in their teens. The type of behavior disturbance is different, but the trouble aroused by the younger child is often more difficult of solution. Again, age bears no relation to mental age, when we are considering the possibilities in an individual case. The

probabilities are higher that an older child will have a higher mental age, and can hence be treated as more nearly responsible for his behavior, but in the individual case this does not hold true. For instance, in the group studied in this series of observations, one 17-year-old had a mental age of only 4 years, another tested 5, and others tested at almost every mental level. There is no way of determining the probable value of one factor from the definite ascertainment of another. In a practical clinic, each individual confronted may be the exception to all known rules, regulations, and scientific observations.

Sex does seem to bear some relationship to the problems of delinquency. There are far more girls in the later teens sent to the Bureau than boys of the same ages. The reason is not the one superficially indicated, namely, that girls are more frequently delinquent than boys. Instead, it seems to be a part of the attitude of the court towards girls and their offenses. Boys of the same age are thought obviously in need of corrective care, and are sent to correctional institutions. Far more young boys are received than girls, the number being about in proportion to their frequency in the juvenile court. Practically all of the older girls are suspected of being immoral, if the offense against sex is not a definitely determined fact. Aside from these indications which cannot be but sketchy, since the number of cases is so small and so selected, sex seems to have very little to do with delinquency.

The factors of race, foreign parentage, and mixed blood have no real bearing upon this group for the numbers so affected are very small in proportion to the size of the group in general. Nor does analysis show any of these individuals standing out as different from his mental-age group, save perhaps that, subjectively, the writer cannot but help feel that the mulatto cases were by far the most difficult to understand and handle.

The delinquency charges against the groups show no clearly demarcated tendencies. Children under 6 years of age or who have a mental age of less than 6, but who are chronologically older, usually get into court charged with incorrigibility or other offenses due entirely to their inability to take care of themselves. A baby 3 years old runs away and no one thinks very much about it. A boy of 16 with a mind of a 3-year-old runs away and is garnered into the court. But even with children who are only 4, 5, or 6 years of age there are occasionally acts which place them in the same group of offenders as their older brothers and sisters.

Mental age is usually regarded as the final solution of all of the complicating situations found in delinquents. A feeble-minded child is delinquent because he is feeble-minded. In a certain sense this is absolutely true, in another sense it is just as false. Feeble-mindedness is by no means a cause of delinquency. That is to say, the mere fact that an individual is feeble-minded does not mean that his mind naturally turns to wrong-doing or evil. The feeble-minded individual is frequently delinquent because the discrepancy between what he understands and can do and what is expected of him is too great. It is feeble-mindedness, plus opportunity, minus right training in sufficient intensity that makes a delinquent moron or imbecile.

Mental age is one of the determiners of delinquency, but this determination is not limited to the cases in which mental age is inferior to the point of feeble-mindedness. It applies just as regularly to any situation in which there is no balance between ability and demands made upon ability. If school demands more than a child can give, he is provoked to truancy. If school offers too little to keep the bright child occupied, he is the most troublesome person in the schoolroom. If force of inducements from a higher level intelligence is greater than respect for the ab-

stract ideas of right and goodness, the wrong thing happens. But from the child's standpoint such behavior is *normal*. From the scientist's angle it is incidental. Given a statement of the other factors, delinquency could be predicted. It is only the social viewpoint which establishes our concept of such a thing as delinquency in these cases. But there are other cases where no one could justify the behavior, anticipate the event, or explain away the lack of apparent causes for it. These are the true problems of delinquency. They are the acts unjustified by environment, mental level, or example. They are the indications of a functional disturbance, which finds motivation to anti-social activity, where the normal-functioning mind would see none.

Mental age bears no very definite relationship to the actual delinquencies in this group of cases. There were no children threatening to murder or commit suicide in the groups with mentalities less than 7, although one 5-year-level boy did shoot a playmate accidentally. These threats are not numerous, but they occur at all levels up to that of the 17-year mentalities. In the same way, stealing, lying, and running away continue manifesting themselves at all levels. Mental age has an influence upon the character of these offenses. With higher mental levels the stealing becomes more subtle, objects of greater value are taken, the desire is inhibited until the time seems most favorable for avoiding detection, and plausible explanations for the disappearance of the stolen goods are often used. The ultimate refinement of stealing leads into forgery, buying and charging under assumed names, and all of the well-known methods of adults whom we call criminal. In a similar way, other changes occur. Running away gives place to elopements, stealing automobiles in which to go, getting arrested and giving names of other offenders who are wanted in distant cities, to gain free transportation. ***But,***

in the individual case, mental level does not determine the type of delinquency one is apt to meet. Of one thing we may be sure. The higher level case will be one in whom craft and cunning render detection more difficult, conviction less certain, and correction more doubtful. With children of a mental level above 12 or 13 clinical work and correction become a struggle of wits.

The group of 369 children reported throughout this book ranged in age from 4 months to 19 years. Fourteen of them were either very young or low-grade dependents, or the siblings of known delinquents on whom preventive work was attempted. The 355 troublemakers ranged in age from 4 to 19 years. From one extreme to the other their offenses were actually serious from the social or community viewpoint. In mental age these troublesome ones varied from 3 years to 17 years. There were 281 who tested between 7 and 12 years of age, with more testing at 9 or 10 than at any other levels.

This does not give very much information that means anything in a practical fashion, save that it emphasizes the variable possibilities. Feeble-minded individuals were found at every level up to a mental age of 12. Normal-testing individuals were also found at all levels from 6 up, and in a few of the lower mental-level groups. In between these two extremely different sorts of children lay many of questionable ability. This wide range comes with each and every mental level studied. Only one thing is constant in the group, whatever the ability, whether the child was feeble-minded, inferior, dully normal, normal, or bright, he was always definitely delinquent. In other words, mental age is not a factor which differentiates normal-behaving children from delinquents.

If, however, one examines other aspects of the intelligence of these individuals, the situation changes. The delinquent gives psychological indications of his condition.

The following ten points show up on the results of standard tests.

1. The range above basal on the Stanford is far greater for this group than in Terman's cases. Comparing the estimated highest possible range for each of his age groups with the maximal range for this delinquent group gives the accompanying table.

COMPARISON OF RANGE ABOVE BASAL OF CHILDREN STUDIED BY TERMAN AND DELINQUENTS STUDIED AT THE BUREAU OF JUVENILE RESEARCH

Mental Age	Maximal Range, Terman Data	Maximal Range, Bureau Data	Average Range, Bureau Data
3	3	5	3.7
4	4	6	4.5
5	5	5	4.5
6	5	8	4.6
7	5	7	4.0
8	7	8	4.0
9	6	12	4.3
10	8	11	6.3
11	9	11	6.6
12	10	11	7.0
13	10	10	7.3
14	9	10	8.0

This means that in all of the groups of delinquents, except the 5- and 13-year-level groups, the known variation of range above the basal age is greater than the greatest probable range as estimated from the Terman material. These two groups are of those levels at which a variation might be expected, because the number of cases handled in the delinquent group was comparatively very small. There is a similar tendency in the range variations at different levels. With Terman's group the age of 14 shows a lessened range. This means that greater ability and greater general intelligence preclude failures as far down as they occur with less intelligent children. The upper limit of the scale

is so near that variability is inhibited. This restraint is noticed at the 13-year-level group with the delinquents. Their variability is enough greater that they reach maximal variations when still inferior in intelligence to Terman's group. The averages of the data on variation among the delinquents indicate that the whole group does not feel this restriction in the same way. Throughout, variability increases as mental age increases. These children do not fill in lacunæ at lower levels as well as normal children do, nor as quickly. Of course, it is possible that some of the variability may be due to the use of a serial method of examining on the delinquent group. Analyzing the years through which successes and failures are scored in the two groups rather eliminates this possibility. It seems as though the greater part of the increased variability of the delinquent group lies in more failures in lower mental-level tests, and in levels farther below their actual mental age.

2. The delinquents can be sorted out into definite subgroups which have varying tendencies to "scatter" in their successes and failures. There is one group that is similar to those reported by Wells. They fail on rhymes, weights, and enclosed boxes. They succeed, just as his psychotic cases did, on vocabulary and digit tests. Their verbal ability corroborates the earlier findings of Binet.

There is another group that fails on digits and all memory tests anywhere near their general level in difficulty. They do superficially well on the verbal tests but fail on all exact vocabularies and definitions. A certain group seems to do especially well on the absurdities, the comprehension tests, the fables, and the logical problems. The findings on these individuals agree with those of Pressey on psychotic individuals. Some of the group have unusual ability in visual imagery of a concrete form, or else in some other type of imagery which substitutes for it in efficient manner. This group succeeds on the cut design in the eigh-

teenth year, the code, the enclosed boxes, and the ingenuity tests, sometimes without any very close relation to their actual mental level. All in all, the peculiar attributes of test distribution found in this group agree with all reported findings on psychotics. There are also typical feeble-minded distributions which agree with those found by Jones and Doll.

3. The quality of the test findings on the Stanford is distinctly a-normal in over half of the delinquent group. Residues of higher levels of intelligence, superior language and grammatical constructions are often found. The disturbances of technique on the drawings are similar to those reported by Foster, but they seem to be even more frequent and more marked. Disturbances of writing similar to those described by Bianchi are also present. The qualities described by Wells are found again and again. Beyond these symptoms there are present egocentric interpretations of data, grandiose interpretations, delayed reactions, rambling, incoherent, and diffuse explanations, and many signs of automatisms, perseveration, inhibition, negativism, and a host of other well-known minor perversions of speech.

4. The association distributions are highly significant. The test proved applicable to most children of even a 6-year level and to some below that level. Some above the 8-year level failed to coöperate. Phrases and individual reactions predominate in the test responses of the younger children but grow steadily more infrequent with the increase of mental level. The tendency to use an occasional phrase appears at all levels, but the average number of phrases used by any one individual is less than 5 for all children with a mental age of 9 or over. This tendency is a direct violation of the directions given, but occurs again and again in repeated tests with the same individuals, despite specific warnings against reactions of more than one word.

Individual reactions also decrease in number with increasing mental age. They reach an average of 7 at the mental age of 13 and remain practically constant above that. Even so, the average number is definitely above the average for children under 16 as it was determined by Rosanoff, his being 5.7. The discrepancy is greater rather than less if we group all of the delinquents from 10 to 16 in mental age. They average 13.3 individual responses which is over twice the number found by Rosanoff and nearly twice the number found by Eastman and Rosanoff for children of the same ages (6.6). Undoubtedly the delinquents are less adaptive, follow test directions less well, lose the aufgabe more readily, are more irregular and individual in their associative thinking.

5. The quality of the performance on the association test gave marked indications of abnormality in 208 of the 353 children to whom the examiners tried to give it. Their individual reactions and the phrase reactions reveal personal characteristics most strikingly. They stand out as individuals overwhelmed with grievances, with feelings of inferiority, with actual apologies for being alive, with phobias, philias, phantasies. There are remnants of every sort of experiences in their responses. Their wishes and beliefs are easily understood. The test gives most valuable indications of their need for correctional work, both educational and social. They are functioning wrongly. They need mental hygiene.

6. Performance test findings merely accentuate what other tests have already shown. These delinquents are not well-balanced, their test ratings from series to series vary so that nothing is predictable. Some who test at a 6-year level on the Stanford score as high on performance tests as others who have Stanford ages of 15, 16, or 17. There is a gradual improvement in ability on the formboard, when we compare the successive mental-age groups, but

the individual variability means that the range of possibilities for children at all mental levels is practically the same.

It is not only on the Seguin formboard that this is true. The adaptation series is perfectly done by some 6-year-level children, whereas some children at every level through 12 years fail to score successfully.

There are some complete successes on the imitation series by children who test 10. There are some complete successes at all mental levels above 10; yet even at a 17-year level one individual cannot score more than 10 years on this test, whereas children with mental ages of 13 go back to a 7-year score in this respect. The scores at other levels are equally "out of relation" to the mental ages of the individuals making them. In general, the average mental level on the imitation series increases each year through the Stanford mental-age groups, but the increases are irregular and the deviations are extreme. These are well worth reproducing as an illustration of the general tendency to discrepancy of test findings.

Scores on the Knox Imitation Series by Children of Different Mental Ages on the Stanford

Stanford Mental Age	Average Mental Age on Knox	Range of Scores on Knox
6.....	7.3	4-14
7.....	9.1	5-15
8.....	11.4	7-17
9.....	11.9	6-17
10.....	12.0	7-18
11.....	13.5	7-18
12.....	13.9	8-18
13.....	14.1	5-18
14.....	14.4	8-16
15.....	14.4	7-18
16.....	16.0	14-17
17.....	14.7	10-18

The Porteus findings merely accentuate the lack of balance in the group. Children whose mental ages differ as

much as 10 years may score the same on this test. Similar irregularity appears on the Healy ratings.

7. School tests bring out another angle of the extreme irregularity of the group. No one expects a child with a mental age of 6 or 7 to do more than first- or second-grade school work and do it well. Yet some of the individuals in this group, who score only 6 years in mental level, score third-grade on literacy. Children who test at 7- and 8-year levels, only, are capable of doing fifth- and sixth-grade work in comprehension of written matter, in spelling very frequently, and sometimes in language and geography. All of the mental-age levels contain such deviates. The irregularity of school ability and accomplishment definitely places this whole group as unstable.

8. The type of general information findings has been reported in detail at each mental level. There are significant pathological indications in the responses of 94 out of the 355 delinquents. This is making due allowance for level and limitations of experience.

9. Their stories reveal the peculiarities of an abnormal mental condition in about half of the cases. A 6-year-level case can barely give a few items, there is no story. A 7-year-level youngster gives a few items, but they are so vague one hardly dares to evaluate peculiarity or deviation, unless the condition is extreme. Above this level it is usually a simple matter to evaluate and interpret the tale as it is given. Just as an insane person reveals his delusions, hallucinations, fears, and beliefs, in his conversation, these children show their attitudes and moods. These are just as significant for the worker with children as the tales of the insane are to the psychiatrist. They indicate another phase of child activity, afford an estimation of its irregularity or reliability.

10. The final point of observation used, the behavior of the individual while under laboratory observation, is per-

haps the most valuable of all. It gives an observation that lies halfway between community behavior and mental behavior as indicated on other tests. The evidence gathered in this field is unmistakable. There were 160 out of the 355 who gave symptoms marked enough to classify them as outside normal limits in their manifestations. They were nervous, hysterical, threatened murder, suicide, and nonspecific revenge. They were moody, depressed, overexhilarated, religious, ecstatic, went through paranoid rages, and frequently wept without cause. They lied, malingered, tried to steal. Masturbation, exhibitionism, neurological disturbances of all types, seizures, spells, and personality changes were incidental to the study of these cases. Other cases were just as delightfully normal in every respect.

A summary of these ten points leads to just one concept, however we express it. These delinquent children are different. They are highly variable in their qualities, most inconsistent in their abilities and their disabilities, surprisingly able, surprisingly stupid, erratic, and queer. They are over-quick and very slow, non-adaptive and nonpersistent, forgetful, laboriously remindful. They are psychopaths.

The medical findings indicate their inferiority physically, their disturbed nervous systems, their stigmata of imperfect development. They live under the handicap of poor eyes, poor hearing, poor teeth, with many types of functional disturbances, bearing the additional burden of inherited disease in many instances.

Their family histories tell why they are as they are. They merely reflect the condition of their parents in many instances. Feeble-mindedness, insanity, neuropathic diatheses, and all they imply, have had an important share in furnishing these children. They are not willful delinquents. They are psychopaths, the unstable children of the unfit.

Delinquency meets its explanation in the psychological laboratory. Feeble-mindedness causes some of it. Lack of right training and right opportunity causes its share. But the chief reason for wrong behavior is the wrong working of the delinquents themselves, their diseased, disturbed, unreliable modes of mental behavior. The understanding of them lies in the study of their psychopathy. But psychopathy itself demands an explanation. The solution of its existence leads back to the physio-medical study of the individual. In some instances, such study seems to explain the psychopathy, but where further research of this type will lead, one can scarcely say, but surely into the fields of medical and social hygiene, as well as into the province of mental hygiene.

The future of the whole problem is overwhelmingly full of possibilities. So far, we have barely touched the surface. But of one thing we may be sure. The only permanent method of attacking the problem of psychopathy is to trace each individual case back towards its source. When we once know the cause of the condition, even in some few of its forms, treatment will become preventive as well as corrective.

Some cases will always remain unsolved, but gradually a larger and larger proportion will yield to analysis and study.

The two years spent in studying this group of delinquents indicated the significance of congenital syphilis as a factor in the causation of such behavior problems. All of the congenital syphilitics found in the group were psychopaths, many of them from presumably stable families. Such syphilitics have not always been easily detected. Blood Wassermanns are not always convincing. Family history is not always full, true, or even available. Stigmata may not evidence themselves, or may be ambiguous in their presence.

The mental characteristics of many of these congenital cases seem absolutely symptomatic. In a number of instances the psychological indications have been the only reason for prolonging research into the smallest detail of the case history. Time is adding constantly to the reliability of the psychological indications, for it sometimes takes a year or more to verify the tentative psychological diagnosis.

To reiterate: congenital syphilitics as they were found in this group of delinquents were all psychopaths. Moreover, their psychopathy has its own characteristics, differentiating it from the non-syphilitic psychopaths. This psychopathy is the groundwork out of which delinquency grows. The two are definitely related. Even though the disease is so terrible in its significance, yet the recognition of its presence means the possibility of alleviation, as well as a more definite knowledge of the future of the individual. The only safe prognosis must be based upon, and related to, the etiology of the condition.

Further research will undoubtedly reveal other groups of psychopaths, differentiate them from the general group, identify their symptoms, determine their special causation. Hope lies in that direction.

In the meantime, a working creed seems possible. These delinquents we have analyzed and commented upon have their reason for being as they are. They are feeble-minded in some instances, but a far greater proportion of them are psychopathic. In a number of these individuals the two conditions exist side by side. The group is not bad. There is no such thing as a bad boy or girl. Either he does not know any better or else he cannot help it. He cannot help environmental handicaps. He cannot predetermine the type of a community or family into which he shall be born. He cannot check his feeble-mindedness nor eliminate his own psychopathy.

Psychopathy can be helped, but the help is not self-help.

Neither can a court sentence or a term at a correctional institution do much, when carried out without the understanding of, and professional handling of, the condition. Punishment? What can it do to *cure?* It will merely add another layer to the mental difficulties from which the child has built up a structure of wrong behavior. It may inhibit the wrong act. And then what happens? The individual has already been overrepressed, overwhelmed by his poorly understood complexes, fears, and desires. His delinquency has been his attempt at compromise between them and what society wishes him to do. We check his reactions, add another load of fear, worry, shame, resentment, more inferiority, and new grievances against all in authority. We remove for a little while the chance of indulgence in the same type of behavior and have done our duty as a state. It is only the elasticity and resiliency of the child mind which keeps any of them from a reënforced and more extreme type of delinquent behavior.

All psychopaths are not delinquents. The delinquent psychopath has had some motivation to wrong behavior which is stronger than in the non-delinquent. His handling must appreciate this. Whether a delinquent psychopath whose delinquency has assumed a chronic form can ever be rehabilitated, only time will tell, but the indications are that his condition can be alleviated to a considerable extent.

The psychopath needs a health régime. Regular living, regular meals, nourishing food, regular sleep, regular rest and work. He needs habits of healthful living so firmly ingrained that they will withstand the shocks and irregularities of everyday life. He needs a long period of such living, with regular demands impartially enforced. The problem is one of morale and habit formation. Just sympathy, and firm, yet sympathetic, justice must lead him into the honorable government of his own affairs. To benefit by his opportunities he must be in good physical condition.

This is a prerequisite, whereas physical hygiene is a necessary daily accompaniment of any scheme of rehabilitation.

The mere fact that so many delinquents are deviates, or psychopaths, and not merely dull, stupid, or feeble-minded, is a promise for the future. Psychopaths, as a group, have never been very intensively studied, but enough has been done to make it clear that at least some of them will gain, stabilize, normalize under the right kind of care. Given a chance to study them in their earlier years, much more preventive work may be done and less corrective work will be necessary.

The psychopath is a chance waste product of our attempts at civilization. He will not grow less numerous. He is with us to stay. It is our duty and our privilege to study and to help him. He feels intensely, lives exceedingly. He is a bundle of contradicting desires, abilities, and defects. He has potentialities. What he needs is early detection, long years of training, supervised parole without stigma, and a chance to make good. He will repay such care as no feeble-minded individual can. He is like the desert sands, and like them he needs an understanding and all powerful master to be made fertile and productive; left undirected, only evil and waste result. No individual can supply that mastery. We need institutions, hospital schools for psychopaths, hospital schools where the young delinquent will be treated, educated, trained, made independent and self-directing, and then sent out to redeem his delinquency.

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INDEX

Accuracy, 163
Adaptation, 220, 232 *ff.*, 439
  board, 244; *see also* Performance tests
  verbal, 364
Age, chronological, 245, 260, 266, 275, 287, 299, 309, 318, 359, 366, 380, 402, 448
Agnes U., 337, 353
Analysis, qualitative, 433; *see also* Mental function
Analytic data, 347, 373
Andrew Y., 335
Angst, 229, 231
Angst-sedative, 231
Anthropometric measurements, 244
Anxiety, 229
Aphasia, 47
Army, tests in, 329
Association tests, 97 *ff.*
  distribution, 261, 268, 279, 290, 302, 312, 321, 361, 368, 406, 452
  individual reactions, 184
  quality, 185, 261, 269, 279, 291, 302, 312, 321, 361, 368, 406, 452
  value, 344
Atavisms, 228
Attitude, 66, 69, 100, 164, 233
  genetic, 227
Aufgabe, 88, 98
"Average" individual, 385

Basal year, 91, 94, 150
Behavior, 100, 381
  during tests, 191
  measure of, 127
  of psychopath, 169
  symptoms, 151, 159
  theory of, 128
  under observation, 263, 271, 282, 294, 305, 315, 324, 362, 369, 409, 454
Benjamin, 376
Binet Scale, 7, 11, 81, 433
  inadequacy of, 119 *ff.*
Blanks, 84, 94
Brain, 220
Bright trouble-maker, 45
Bureau of Juvenile Research, 30, 235 *ff.*

Character, 126, 158, 384
Charges, 446
Child who is—
  "at age" on tests, cannot learn, 52
  below in tests, can learn, 53
  bright but fails, 46
  clumsy, 49
  erratic, 165
  idle, 49
  lazy, 48
  nervous, 165
  not concentrating, 44, 82
  obstinate, 49
  peculiar, 165
  precocious, 124
  queer, 165
  slow, 49
  unstable, 165
Child's story, 190
Clarence, 425
Clinic, 58 *ff.*, 80, 237
  psychiatric, 63
Clinical psychologist, 63 *ff.*, 154, 438
Clinical psychology, 4, 22 *ff.*, 27, 44 *ff.*, 127, 436 *ff.*

Case history, 103 *ff.*
Cave men, 221
Compensation, 226
Conditioning stimuli, 129
Content, 243
Convulsions, 104
Cora, 252
Correction, 436
Criminality, 65

David, 424
David, T., 337, 341
Defective delinquents, 125, 157
Delinquency, 24, 42 *ff.*, 125, 216 *ff.*, 226, 428
  charges, 260, 266, 276, 288, 300, 310, 319, 359, 366, 403, 447
Delinquents, 65, 118 *ff.*, 126, 152
Dementia paralytica, 136
Dementia praecox, 125
Dependency, 24
Dependents, 152, 398
Deorientation, 48
Deterioration, 221, 298, 328; *see also* Diagnoses
Deviates, 18, 215
Deviation, 389
Diagnoses,
  case findings, 264, 272, 284, 296, 307, 317, 326, 365, 370, 409, 456
Diagnosis, 13 *ff.*, 20 *ff.*, 25 *ff.*, 52, 58, 74, 92, 102 *ff.*, 114, 117, 245, 248 *ff.*, 388, 402, 440
Dick, 254

Earl, 254
Education, specialized, 51
Elsa, 251
Emotion, 99, 160
Encroachage, 401
Environment, 129, 217
Epilepsies, 65
Equipment, 62, 79, 83 *ff.*, 438
Etherization, 413
Eva, 254
Examination, 6, 67 *ff.*, 80 *ff.*, 242, 439
Excitability, 227

Failure, 73
Family history, *see* History
Fatigue, 73, 88, 141
Fear, 167, 350
Feeble-mindedness, 14, 20, 35, 42, 65, 118, 136; *see also* Diagnoses
Feeble-minded, potentially, 13, 52
Filing, 84
Flight, 38
Food, 228 *ff.*
Fugues, *see* Truancy
Function, 141, 144, 158, 163; *see also* Mental function

General information, 83, 99, 188, 244, 263, 270, 281, 293, 305, 314, 323, 362, 369, 408, 454,
Generalizations, 264, 274, 286, 297, 308, 317, 326, 366, 410
Gerald, 422
Gladys, 420
Glandular disturbances, 420
Goddard adaptation board, 82; *see also* Performance tests
Gordon, 415
Grant L., 333
Group tests, 17 *ff.*, 27, 31
Growth, 166

Habit, 131, 230
Handwriting, 418
Harold N., 413
Harold, 421
Healy Pictorial Completion, 244; *see also* Performance tests
Helen, 256

Helen N., 341
Henry G., 334, 345
Heredity, 272, 284, 295, 306, 316, 325, 365, 370, 409, 455
History, 109
  case, 75
  educational, 104
  family, 106; *see also* Heredity
Hysteria, 54, 77

Ida H., 335
Ideals, 57
Idiot, excitable, 249
Immorality, 14, 36, 222
Individual, 21 *ff.*, 24, 27, 56, 105, 122, 402, 435
Infantile insanity, 51
Instability, 386
Instincts, 128
Intelligence, viii, 20, 134, 136
  quotient, 54, 120 *ff.*, 124, 126, 260, 266, 275, 287, 300, 309, 318, 328, 359, 366, 388, 403, 437
  rating, 149, 155
Introspection, 127
Ireland L., 338
Irritability, 128

Jasper, 252
Joan, 413
John, 414

Karl, 412
Kent-Rosanoff association test, 179, 243; *see also* Association
Knox Imitation Series, 82, 244; *see also* Performance tests

Learning, 5, 26, 129 *ff.*
Level, 144, 148, 158, 163; *see also* Mental level

Maladjustment, 231
Marie, E., 332
Masturbation, 40 *ff.*
Mean variation, 262
Medical findings, 263, 271, 283, 294, 305, 315, 325, 364, 369, 409, 455
Methodology, 32, 79 *ff.*
Mental, age, 11, 35, 54, 140, 246, 381
  disease, 31, 166
  function, 98, 139 *ff.*, 143, 441
  hygiene, 91, 133
  level, 139, 143, 441
  testing, 8, 12
Morale, 240 *ff.*
Morbid genius, 50
Morphological measurements, 263, 271, 283, 295, 306, 316, 325, 365, 370, 409
  tests, 83
Moron, 118

Naomi C., 421
Naomi I., 332
Narcissism, 344
Nardo, 257
Ned K., 339
Nervous system, 222
Nettie L., 333
Neuroses, stomach, 230
Nomadism, 231; *see also* Truancy
Nonadaption, 232
Normality, 20

Chio Literacy test, 243
O. K. slips, 241 *ff.*
Oma T., 338
Opal G., 336
Opha Y., 371
Orma S., 339
Otto X., 363
Own story, 99, 244, 263, 270, 282, 294, 305, 314, 324, 362, 369, 408, 454

Parents, 76
Paul, 412
Pavlov, 130, 426 *ff.*

Performance tests, 96, 185, 262, 269, 280, 291, 303, 312, 321, 361, 368, 407, 452
Personality, 67 *ff.*, 120, 126, 159
Perspective, 70
Placing, industrial, 123
Planning, 219
Point Scale, 15, 88
Porteus maze, 82, 244; *see also* Performance tests
Potential feeble-mindedness, *see* Diagnosis
Procedure, 237
Prognosis, 52, 54, 116, 328, 440
Promotion, 36
Prostitution, 65
Provision, vii, 265
Psychiatrist, 153 *ff.*
Psychiatry, 5, 79
Psychic ataxia, 429
Psychology, 4 *ff.*, 56
Psychoanalysis, 133
Psychopath, 67, 145, 165, 167 *ff.*, 458; *see also* Diagnosis
Psychopathy, 30, 141 *ff.*, 147, 152, 155, 387
  points of, 170, 179, 243, 443
Psychoses, 65, 124, 298
Public, education of, 237
Punishment, 152

Quality, 388; *see also* all test discussions
Queed Y., 334

Race, 380
Rachel, 418
Rapport, 71
Recividist, 41
Recording, 85
Reflexes, 128, 130, 426 *ff.*
Regime, 243
Regressions, 228, 328; *see also* Diagnosis
Results, 81
Retardation, 23
Rob, 254
Roswell X, 335, 425
Run-a-way mind, 44
Running away, *see* Truancy

Samuel, 422
Samuel N., 339
Sawyer, 416
School grades, 260, 267, 277, 288, 300, 310, 319, 360, 367, 404
  performance, 263, 270, 280, 292, 304, 313, 322, 362, 369, 407, 454
  tests, 244
Seguin formboard, 33, 81, 96, 244; *see also* Performance tests
Serial testing, 87 *ff.*, 439
Serepta, 193
Sex, 257, 260, 266, 275, 287, 299, 309, 318, 359, 366, 402, 445, 448
  offenders, 403
Sleep, 134
Slums, 15, 217
Social agencies, 225
Special defects, 140
Speech, 132
Spinal fluid, 416
Split personalities, 38
Stanford-Binet, 16 *ff.*, 244
  distribution, 175, 261, 268, 277, 289, 301, 311, 320, 360, 367, 404, 450
  quality, 177, 261, 268, 278, 290, 301, 311, 320, 360, 368, 406, 451
  range, 170, 260, 267, 277, 289, 300, 310, 319, 360, 367, 404, 449
Stealing, 40, 222
Syphilis, congenital, 14, 253, 255, 257, 388 *ff.*, 456

Tact, 68
Technique, 30, 40, 153 *ff.*

Temper, 38
Tests, 7, 10, 16, 33, 79 *ff.*, 87 *ff.*, 96, 100, 121 *ff.*, 125 *ff.*, 189
Thomas, 256
Thomas S., 333
Traumatic precipitation, 414
Treatment, psychological, 26
Truancy, 25, 38, 222, 231
Truman Z., 337

Understanding the child, 72

Variability, 247
Verbalism, 363
Virgil N., 340

Walter, 256
War, 17, 329, 435
Wassermann, 33, 395 *ff.*, 412; *see also* Medical findings
William, 415

Xanders I., 341

Yates, N., 336, 351
Year grading, 15

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